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OM protein - protein search, using sw model

Run on: December 22, 2004, 09:24:22 / Search time 38 Seconds

(without alignments)
621.295 Million cell updates/sec

Title: US-09-577-657A-1

Perfect score: 1847
Sequence: 1 FMNKGESSYVAQNSFTQO.....LEAKLPKTSIIIVLSKIDG 356

Scoring table: BLOSUM62

Gapop 10.0, Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database : Issued Patents AA:*

- 1: /cgn2_6/ptodata/1/1aa/5A_COMB.pep:*
- 2: /cgn2_6/ptodata/1/1aa/5B_COMB.pep:*
- 3: /cgn2_6/ptodata/1/1aa/6A_COMB.pep:*
- 4: /cgn2_6/ptodata/1/1aa/6B_COMB.pep:*
- 5: /cgn2_6/ptodata/1/1aa/6C_COMB.pep:*
- 6: /cgn2_6/ptodata/1/1aa/6D_COMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	713	38.6	359	4	US-09-653-375B-8
2	658.5	35.7	385	4	US-09-971-020A-3
3	649.5	35.2	385	4	US-09-971-020A-5
4	630	34.1	371	4	US-09-653-375B-9
5	621.5	33.6	364	4	US-09-653-375B-2
6	620.5	33.6	372	4	US-09-971-020A-7
7	614	33.2	359	4	US-09-971-020A-1
8	570	30.9	359	4	US-09-653-375B-10
9	114.5	6.2	913	4	US-09-107-532A-4267
10	101	5.5	915	4	US-09-583-110-3100
11	97.5	5.3	254	4	US-09-586-106D-161
12	97.5	5.3	2763	3	US-08-496-944-2
13	94	5.1	254	4	US-09-586-106D-143
14	93.5	5.0	697	4	US-09-248-796A-2663
15	93	5.0	308	3	US-09-134-001C-4434
16	92	5.0	335	4	US-08-894-119-4
17	90	4.9	417	4	US-09-248-796A-16410
18	90	4.9	1729	4	US-09-696-115B-2
19	89	4.8	156	4	US-09-107-532A-4915
20	89	4.8	357	3	US-09-134-001C-4891
21	88.5	4.8	345	4	US-09-919-497-61
22	87	4.7	423	4	US-09-248-796A-18022
23	87	4.7	561	4	US-09-248-796A-25413
24	86.5	4.7	252	4	US-09-710-279-1948
25	86.5	4.7	526	3	US-09-134-001C-4912
26	86.5	4.7	1447	3	US-09-376-330-17
27	86	4.7	1017	4	US-09-762-724-12

28	85.5	4.6	528	4	US-09-248-796A-18787	Sequence 18787, A
29	85.5	4.6	870	4	US-09-538-092-1168	Sequence 1168, Ap
30	85.5	4.6	1023	4	US-09-762-724-14	Sequence 14, Appl
31	85	4.6	346	4	US-08-894-119-2	Sequence 2, Appl
32	85	4.6	885	1	US-08-484-105-14	Sequence 14, Appl
33	85	4.6	885	1	US-08-484-106-14	Sequence 14, Appl
34	84.5	4.6	460	4	US-09-543-681A-6789	Sequence 6789, Ap
35	84	4.5	451	4	US-09-134-000C-4660	Sequence 4660, Ap
36	83.5	4.5	628	4	US-09-710-279-2844	Sequence 2844, Ap
37	83.5	4.5	629	3	US-09-134-001C-4394	Sequence 4394, Ap
38	83	4.5	630	4	US-09-583-110-4711	Sequence 4711, Ap
39	82.5	4.5	591	4	US-09-561-077C-18	Sequence 18, Appl
40	82.5	4.5	591	4	US-09-221-014-18	Sequence 18, Appl
41	82.5	4.5	822	4	US-09-252-991A-29534	Sequence 29534, A
42	82	4.4	254	4	US-09-586-106D-1139	Sequence 1139, App
43	81.5	4.4	386	4	US-09-328-352-7608	Sequence 7608, Ap
44	81.5	4.4	592	4	US-09-408-020-80	Sequence 80, Appl
45	81	4.4	411	4	US-10-101-464A-982	Sequence 982, App

ALIGNMENTS

RESULT 1					
US-09-653-375B-8					
Sequence 8, Application US/09653375B					
Patent No. 6558922					
GENERAL INFORMATION:					
APPLICANT: Doudareva, Natalia					
APPLICANT: Murfitt, Lisa M.					
TITLE OF INVENTION: Methods and Compositions for Production of Floral Scent					
TITLE OF INVENTION: Compounds					
FILE REFERENCE: 76-02					
CURRENT APPLICATION NUMBER: US/09/653, 375B					
CURRENT FILING DATE: 2000-09-01					
PRIOR APPLICATION NUMBER: US 60/152,393					
PRIOR FILING DATE: 1999-09-03					
NUMBER OF SEQ ID NOS: 10					
SOFTWARE: Patent In Ver. 2.0					
SEQ ID NO 8					
LENGTH: 359					
TYPE: PRT					
ORGANISM: <i>Clarkia breweri</i>					
US-09-653-375B-8					
Query Match					
Best Local Similarity 41.5%; Pred. No. 2.5e-67;					
Matches 152; Conservative 68; Mismatches 110; Indels 36; Gaps 8;					
QY	2	MNRGESSYVAQNSFTQO	VASMAOPALENAVETLFSRDFHLQALNADICGAGPNT-F	60	
DB	9	MKGAGENSYVANSFIOR	OVISITKPIFEAITALYSQDVTTRIAIDICSSGNL	68	
QY	61	AV---ISTIKMKKEKRE	LNCOTLELOVYINDLFGNFTLFGKLSSEVIGNKCEYPC	117	
DB	69	AVTEIKTVEIRKMKGR	---NSPEYQIFLNDLPGNFMALFRSLPE---NDVGV-C	121	
QY	118	YVMGPGSFHRLPFRNS	LHVHSSYSVHWLTOAPKGLTSEGLANKKTIYSKTSPPV	177	
DB	122	FINGVPGSFYRLPFR	NTHFRHSSYSILMWLSQVIGIES-----NKGNIYMAITCPOS	175	
QY	178	VREAVLSFHDFTFM	FLNARSGEVVPPNCVTLILRGRCSPDSMQSFTWELLAMALAE	237	
DB	176	VLNAYKQFODHML	FLFCRAQEVVPGRMVLTIGRSEDRASTECLIVQLMALNLQ	235	
QY	238	IVSQGLIDEDKLD	TFENISYFASLEEVKDIVERDGSFTDHIIEGFDL-----D	285	
DB	236	MVSEGLIEBKDK	ENIPQYTPSPRYEVAELIKESFLIDHIEASEIYWSCTKDDGGG	295	
QY	286	SVEQENDKMWG	EKFTVRVAFTPEIISNOFGPEINDKLYDKFTHIVSDLEAKLP	345	
DB	296	SVEER-----	GVNVARCMAVAEPLLDHFGEXAIIIDVFRHYLYLIIERMSKEKTKFI	348	

QY 346 STILVL 351
Db 349 NVIVSL 354

RESULT 2

US-09-971-020A-3

Sequence 3, Application US/09971020A

Patent No. 6734342

GENERAL INFORMATION:

APPLICANT: Sano, Hiroshi

APPLICANT: Kusano, Tomonobu

TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the

FILE REFERENCE: 026350-068

CURRENT APPLICATION NUMBER: US/09/971,020A

PRIOR APPLICATION NUMBER: JP 2000-307,149

PRIOR FILING DATE: 2000-10-06

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 3

LENGTH: 365

TYPE: PRT

ORGANISM: Coffea arabica

US-09-971-020A-3

Query Match 35.7%; Score 658.5; DB 4; Length 385;

Best Local Similarity 38.2%; Pred. No. 1.9e-61;

Matches 150; Conservative 74; Mismatches 106; Indels 63; Gaps 11;

QY 2 MNRGESSYAQNSFTQVASMALPENNVELTFSRDPH--LQALNADLGCAGPNT 59

Db 9 MNGGEGASVAKNSFQVLAKVKPVLQCVBELRANLPINIKCIKADLGCAGPNT 68

QY 60 ---FAVISTIKMKKCKRELNCOTLE--LOVYINDLFGNDNTLTKGLSS----- 105

Db 69 LITVMDIVQSIDVROEMK--NELRPTIQLVFLTDLPQNDNSVFMLLPSFYRKLKENG 126

QY 106 EVGNKCEVPYCWGVPSFHGRLLPFRNSLHLVHSSYSVHMLTQAPKGLTSRGLALNK 165

Db 127 RIGS-----CLIAMPGSFHGRLLPFRNSHFLHSSYSLOQLSGVPSGLVTELGITANK 180

QY 166 GKIVSKTSPVRYEAYISQFHEFTMFLNARSGEVNPGCNVL--ILRGQSDPSDMQ 223

Db 181 RSIYSSKASPPVQKAYLDQFTKDTFTPLRMSEBELSRGMLLTCTCKGDCDGPV--- 237

QY 224 SCFTMELAMALAEIVSQGLIDEDKLDFTNIPSYFASLEEVKDIYERDGSFTIDHIGFD 283

Db 238 ---TWDLLEMAINDLVAGRLGEEKLDSEFNVPIYASVEVKCMVEEGSFELLYLQTFK 294

QY 284 L-----DSVENOE-----NDKVRGGEKFTKVRATFPTIISQFGEIMDKLYDKF 329

Db 295 LRYDAGSIDDCCVRHSPVSDHANAHAVALIRSVETPLASHGELIIPDIFHRF 354

QY 330 -----THIVSDLEAKLPKTSI 347

Db 355 ATNAKVIIRLKGKGFYNNLIIS--LAKKPEKSDI 365

RESULT 3

US-09-971-020A-5

Sequence 5, Application US/09971020A

Patent No. 6734342

GENERAL INFORMATION:

APPLICANT: Sano, Hiroshi

APPLICANT: Kusano, Tomonobu

TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the

FILE REFERENCE: 026350-068

CURRENT APPLICATION NUMBER: US/09/971,020A

PRIOR FILING DATE: 2001-10-05

PRIOR APPLICATION NUMBER: JP 2000-307,149

PRIOR FILING DATE: 2000-10-06

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 5

LENGTH: 385

TYPE: PRT

ORGANISM: Coffea arabica

US-09-971-020A-5

Query Match 35.2%; Score 649.5; DB 4; Length 385;

Best Local Similarity 38.5%; Pred. No. 1.7e-60;

Matches 151; Conservative 71; Mismatches 109; Indels 61; Gaps 11;

QY 2 MNRGESSYAQNSFTQVASMALPENNVELTFSRDPH--LQALNADLGCAGPNT 59

Db 9 MNGGEGASVAKNSFQVLAKVKPVLQCVBELRANLPINIKCIKADLGCAGPNT 68

QY 60 ---FAVISTIKMKKCKRELNCOTLE--LOVYINDLFGNDNTLTKGLSS-----E 106

Db 69 LITVMDIVQSIDVROEMK--NELRPTIQLVFLTDLPQNDNSVFMLLPSFYRKLKENG 127

QY 107 VGNKCEVPYCWGVPSFHGRLLPFRNSLHLVHSSYSVHMLTQAPKGLTSRGLALNK 166

Db 128 RIGS-----CLIAMPGSFHGRLLPFRNSHFLHSSYSLOQLSGVPSGLVTELGITANK 181

QY 167 KIVSKTSPVRYEAYISQFHEFTMFLNARSGEVNPGCNVL--ILRGQSDPSDMQ 224

Db 182 SIYSSKASPPVQKAYLDQFTKDTFTPLRMSEBELSRGMLLTCTCKGDCDGPV--- 237

QY 225 CFTEMLAMALAEIVSQGLIDEDKLDFTNIPSYFASLEEVKDIYERDGSFTIDHIE--- 280

Db 238 ---TWDLLEMAINDLVAGRLGEEKLDSEFNVPIYASVEVKCMVEEGSFELLYLQTFK 295

QY 281 ---GFPLD-----SVENQENDKVRGGEKFTKVRATFPTIISQFGEIMDKLYDKF- 329

Db 296 RYDAGSIDDCCVRHSPVSDHANAHAVALIRSVETPLASHGELIIPDIFHRFA 355

QY 330 -----THIVSDLEAKLPKTSI 347

Db 356 TNAKVIIRLKGKGFYNNLIIS--LAKKPEKSDI 365

RESULT 4

US-09-653-375B-9

Sequence 9, Application US/09653375B

Patent No. 6538922

GENERAL INFORMATION:

APPLICANT: Doudareva, Natalia

APPLICANT: Murfitt, Lisa M.

APPLICANT: Mann, Craig

TITLE OF INVENTION: Methods and Compositions for Production of Floral Scent

FILE REFERENCE: 76-02

CURRENT APPLICATION NUMBER: US/09/653,375B

PRIOR FILING DATE: 2000-09-01

PRIOR APPLICATION NUMBER: US 60/152,393

NUMBER OF SEQ ID NOS: 10

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 9

LENGTH: 371

TYPE: PRT

ORGANISM: Arabidopsis thaliana

US-09-653-375B-9

Query Match 34.1%; Score 630; DB 4; Length 371;

Best Local Similarity 37.3%; Pred. No. 1.9e-58;

Matches 135; Conservative 84; Mismatches 131; Indels 12; Gaps 5;

QY 1 FMNRGESSYAQNSFTQVASMALPENNVELTFSRDPHILQALNADLGCAGPNTF 60

Db 11 YMTGGDKTYSARNSLQKASDTAKHITLFTLQGLY-KETPKSLGLADGCSGPNLT 69
Qy 61 AVIST-IRKMEKKRELANCOTL-ELQVYLANDLFENDFTLFGKLSSEVIGNK----- 111
Db 70 STIDFIFTVGVAAHREIRPQPLPEFSIFLNDLPNDNFIFKSLPDPFIELKRNNGD 129
Qy 112 CEEVPCYMGVGVGSPHGLFPFNSLHLVHSSYVHMLTQAPKGLSREGALNGKITYS 171
Db 130 CPSV--FLAAYPGSYGRLFPENTHIFVYASHSLMWSLKVPLALVDBCKSLNKKCVSIC 187
Qy 172 KTSPPVREAYLSQFHEDFTMLNARSOEVVNGCMVLILRGQCSDPDSMQSCTWEL 231
Db 188 SLSSBAVAKAYCSQCKEDFSIFLRCRSMKMSAGRMVLIIGRBEPDHYDRGNSFWELL 247
Qy 232 AMAIELVSGILDEDKLDTFNIPSYFASLEVKOIVERDGSFTIDHIEGFLDSVENOE 291
Db 248 SRSIADLVAQGETEBEKLDSDYDMHFYAPSADIEBGEVDKESFELERLEMKVKDKNT 307
Qy 292 NDKWVRGKFTKVVRAFTEPIISNOGPEIMDKLDKFTHIVSDLEAKLPKTSIIIVL 351
Db 308 EGDISTYGAVAKTVAVQESMLVQHFGKILDKLPDYICRMVDELAKEDIRPIITVVVL 367
Qy 352 SK 353
Db 368 RK 369

RESULT 5
US-09-653-375B-2
; Sequence 2, Application US/09653375B
; Patent No. 6558922

; GENERAL INFORMATION:
; APPLICANT: Doudeleva, Natalia
; APPLICANT: Murfite, Lisa M.
; TITLE OF INVENTION: Methods and Compositions for Production of Floral Scent
; TITLE OF INVENTION: Compounds
; FILE REFERENCE: 76-02
; CURRENT APPLICATION NUMBER: US/09/653,375B
; PRIOR FILING DATE: 2000-09-01
; PRIOR APPLICATION NUMBER: US 60/152,393
; PRIOR FILING DATE: 1999-09-03
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 364
; TYPE: PRT
; ORGANISM: Antirrhinum majus
US-09-653-375B-2

Query Match 33.6%; Score 621.5; DB 4; Length 364;
Best Local Similarity 38.1%; Pred. No. 1.5e-57;
Matches 140; Conservative 64; Mismatches 128; Indels 35; Gaps 8;

Qy 5 GEGESSYANSSFTQOVASMAQPALENAVETL-----FSRDFHQLALNAADLGCAAGN 58
Db 14 GDGETSYANNNGSLQCYVMMSKSLHVLDETLKDIGHVGPKCFKXW----DMGSSGPN 68
Qy 59 TFAVISTIKRMMEKKRELANCOTL-ELQVYLANDLFENDFTLFGKLSSEVIGNKCEEVPC 117
Db 69 ALLVMSGINTIEDYTEKININELPEFEVFLNDLDNDNFNLFKLSHE-NQN-----C 121
Qy 118 YMGVPGSPHGLFPFNSLHLVHSSYVHMLTQAPKGLSREGALNGKITYSITSPPV 177
Db 122 FVYGLPGSPYGRLLPKKSLHFAYSSYSIHWLSQVPEGLEDN-----NQNIYMATESPPE 176
Qy 178 VREALSPHEDFTMLNARSOEVVNGCMVLILRGQCSDPDSMQSCTWELLMATAE 237
Db 177 VKAKAKYERDFSTFLKRGEEIVPGRMVLTNGRSEVDESSDOLAIFTLAKTIVD 236
Qy 238 LVSQGLDEDKLDTFNIPSYFASLEVKOIVERDGSFTIDHIEGFLD--DSVEMQEND-- 293

Db 237 MVAEGLVMKDDLYSFNIPISPECTREVEAALISEGFTLDRLEVRVCMDSYTDQDDQ 296
Qy 294 -----KMWGKERTKVVRAFTEPIISNOGPEIMDKLDKFTHIVSDLEAKLPKTS 346
Db 297 ODPSTFGKORSGKVADCVRAITBEMLASHGSTIMDLFGKIAKIVBHLSEVNSYFS 356
Qy 347 IIVLSK 353
Db 357 IIVLSR 363

RESULT 6
US-09-971-020A-7
; Sequence 7, Application US/09971020A
; Patent No. 6734342

; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Kozumi, No. 6734342omu
; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the
; TITLE OF INVENTION: Gene Encoding Said Polypeptide
; FILE REFERENCE: 026350-068
; CURRENT APPLICATION NUMBER: US/09/971,020A
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: JP 2000-307,149
; PRIOR FILING DATE: 2000-10-06
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 372
; TYPE: PRT
; ORGANISM: Coffea arabica
US-09-971-020A-7

Query Match 33.6%; Score 620.5; DB 4; Length 372;
Best Local Similarity 38.1%; Pred. No. 2e-57;
Matches 144; Conservative 71; Mismatches 116; Indels 47; Gaps 10;

Qy 2 MNRGESSYANSSFTQOVASMAQPALENAVETLFSRDFH--LOALNAADLGCAAGN 59
Db 9 MNGEGDTSYAKNSAYNDLVAKVPVLEQCVRBLRANLPINIKCIVADLGCAAGN 68
Qy 60 FA-----VISTIKRMMEKKRELANCOTL-ELQVYLANDLFENDFTLFGKLS----- 105
Db 69 LITVYDVISDKVQGEKKNELRPT--IQFLNDLFENDNSVYKLLPSFYKLEKENG 126
Qy 106 EVIGNKCEVPCYVGVGSPHGLFPFNSLHLVHSSYVHMLTQAPKGLSREGALNK 165
Db 127 RKIGS-----CLIGAMGSPFSRFLPEBSMHFLHSCYCLQWLSQVPSGLVTGLISTNK 180
Qy 166 GKITYSKSPPVVREAYLSQFHEDFTMLNARSOEVVNGCMVL--ILRGQCSDPDSMQ 223
Db 181 GSIVSSKSRPVPQAYLDQFTKQFTFLRHSEBLFPHGMLLTCICKGYEL----DAR 236
Qy 224 SCFTWELAMAYIELVSGILDEDKLDTFNIPSYFASLEVKOIVERDGSFTIDHIE--- 280
Db 237 NAI--DLLEMAINDLVGCHLEEKLDSPNLPYIPSAEKKCIYEEGSPFIIYLETFK 294
Qy 281 -----GPDLSVENQENDKWRGKFTKVVRAFTEPIISNOGPEIMDKLDKFTHIVS 335
Db 295 VLYDAGFSID-----DEHKAETVAVSVAVVEPIASHFGAIIIDIPIHFAKHA 347
Qy 336 DLEAKLPKTSIIIVLSK 353
Db 348 VLPCKGPFYNNLIISLAK 365

RESULT 7
US-09-971-020A-1
; Sequence 1, Application US/09971020A
; Patent No. 6734342
; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi

APPLICANT: Kusano, Tomonobu
APPLICANT: Koizumi, No. 6734342om
TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the
TITLE OF INVENTION: Gene Encoding Said Polypeptide
FILE REFERENCE: 026350-068
CURRENT APPLICATION NUMBER: US/09/971,020A
CURRENT FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: JP 2000-307,149
PRIOR FILING DATE: 2000-10-06
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 1
LENGTH: 378
TYPE: PRT
ORGANISM: Coffea arabica
US-09-971-020A-1

Query Match 33.2%; Score 614; DB 4; Length 378;
Best Local Similarity 36.2%; Pred. No. 1e-56;
Matches 140; Conservative 78; Mismatches 111; Indels 58; Gaps 11;
QY 2 MNRGEGESSYAONSSFTQVYASMAOPALENAVETLPSRDPH--LQALNADIGCAAGPNT 59
DB 9 MNRGEGESSYAONSSFTQVYASMAOPALENAVETLPSRDPH--LQALNADIGCAAGPNT 67
QY 60 FA---VISTIKRMMEKCKREINQCTLEOVYVNDLFGNDPNTLPGKLS----- 105
DB 68 LITVRDIVQSIDKVGGEKNELEPRT--IQIFLNDLFQNDPNSVRLKLPSPFKLEKENG 125
QY 106 EYGNKCEVPYCVNMGVPSFHGRLLFPNNSHLVHSSVHMLTQAPKGLTSREGALNKK 165
DB 126 KRIGS-----CLISAMPSPFYGRLLFPNNSHLVHSSVHMLTQAPKGLTSREGALNKK 179
QY 166 GKIIYSKTSPPVYREAVLSQFHEDFTMFLNARSQVNVNCGVLT--ILRGQCSPPSDMQ 223
DB 180 GSIVSSKGRPPVQAYIDQFTKDTTFRIRHSKELFSRGRLTLCICKVDFEPDNPDL- 238
QY 224 SCFTWELLAMAIELVSOGLIDEDKLDFTNIPSPYASLEEVYDIVERDGSFTIDHIE--- 280
DB 239 -----DLIDMAINDLIVGLLEEKLDSEFNIPFPSPASLEEVYDIVERDGSFTIDHIE--- 293
QY 281 -----GFDLSEVQENDKVRGKEFTVYRAFTPIISNOGPEIMDKLYDK----- 328
DB 294 AHYDAFISIDDDYPRSHQIAEYVASLIRSVYEPILASHFGAIMEDLFHLAKHAAK 353
QY 329 -----FTHIVSDLEAKLPEKTSI 347
DB 354 VLHMGKGCYNLIIS--LAKKPEKSDV 378

RESULT 8
US-09-653-375B-10
Sequence 10, Application US/09653375B
Patent No. 6558922
GENERAL INFORMATION:
APPLICANT: Doukareva, Natalia
APPLICANT: Murfitt, Lisa M.
APPLICANT: Mann, Craig
TITLE OF INVENTION: Methods and Compositions for Production of Floral Scent
FILE REFERENCE: 76-02
CURRENT APPLICATION NUMBER: US/09/653,375B
CURRENT FILING DATE: 2000-09-01
PRIOR APPLICATION NUMBER: US 60/152,393
PRIOR FILING DATE: 1999-09-03
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 359
TYPE: PRT
ORGANISM: Arabidopsis thaliana
US-09-653-375B-10

Query Match 30.9%; Score 570; DB 4; Length 359;
Best Local Similarity 36.9%; Pred. No. 4.6e-52;
Matches 136; Conservative 64; Mismatches 137; Indels 32; Gaps 10;
QY 2 MNRGEGESSYAONSSFTQVYASMAOP-ALENAVETLPSRDPHQLQALNADIGCAAGPNT 60
DB 1 MNRGEGESSYAONSSFTQVYASMAOP-ALENAVETLPSRDPHQLQALNADIGCAAGPNT 59
QY 61 AVISTIKRMMEKCKREINQCTLEOVYVNDLFGNDPNTLPGKLS-----GLSEYGNKCE 113
DB 60 LAMSAIATIMESYQOMSKNPEIDCYINDLPENDPNTTFLPSFOEKLPEVYK--- 116
QY 114 EYPCYVWVPSFHGRLLFPNNSHLVHSSVHMLTQAPKGLTSREGALNKKIYISKT 173
DB 117 --WVSGVPSFYSRLFPKSLFHVHSAFSLHMLSRIPDLGS-----NTKSIHKYP 167
QY 174 SPVYREAVLSQFHEDFTMFLNARSQVNVNCGVLT--ILRGQCSPPSDMQSCF-TWELLA 232
DB 168 YPSNVYSYLNQFKIDSLFLKNSSEVHNGHMLTFVGKVSDTLS-KDCFGVMSLLS 226
QY 233 MAIAELVSOGLIDEDKLDFTNIPSPYASLEEVYDIVERDGSFTIDHIEGFD-----LDS 286
DB 227 DCLIDLASEGFVNDSPVSNFMPFPYNNEEVREFILKESFETTKLEKFDHVPYKIDR 266
QY 287 VEMQEND--KVRGKEFTVYRAFTPIISNOGPEIMDKLYDKFTHIVSDLE-AKLPK 343
DB 287 EEDDEOSLOLEAGIKHNASRACITTEPLVAFHGDALIEPVFNKAYHAKYLSVSNHR 346
QY 344 TTSIIIVLS 352
DB 347 NMTLIVIVS 355

RESULT 9
US-09-107-532A-4267
Sequence 4267, Application US/09107532A
Patent No. 6583275
GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
NUMBER OF SEQUENCES: 7310
CORRESPONDENCE ADDRESS:
ADDRESSSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
CITY: Waltham
STATE: Massachusetts
COUNTRY: USA
ZIP: 02154
COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
COMPUTER: PC
OPERATING SYSTEM: <Unknown>
SOFTWARE: ASCIT
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Denke
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007
TELEFAX: (781)893-8277
INFORMATION FOR SEQ ID NO: 4267:
SEQUENCE CHARACTERISTICS:
LENGTH: 913 amino acids
TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHEICAL: YES
ORIGINAL SOURCE:
ORGANISM: Enterococcus faecium
FEATURE:
NAME/KEY: misc feature
LOCATION: (B) LOCATION 1..913
SEQUENCE DESCRIPTION: SEQ ID NO: 4267
US-09-107-532A-4267

Query Match 6.2%; Score 114.5; DB 4; Length 913;
Best Local Similarity 21.3%; Pred. No. 0.0083;
Matches 73; Conservative 51; Mismatches 116; Indels 101; Gaps 17;

QY 71 EKKRELCNCTLE-LQVYLAND--LFGNDENTL-----FKGLSSVYIG 109
DB 5 EKKRRGRSMOSIKNTLRLLDLMKRIFFKQNPATLLIIMIPSLYAMFNKAL-WDPVG 63
QY 110 NKCE-EVPCYVMGVGSGFHR--LFRNSLHVSSYSVHMLTQAPKGLTSREGU--ALN 164
DB 64 NTGELPIAVYADKPAEFGQKEVAIGEYIESLHKQKLGW---QFVDSKEQLEDGVR 118
QY 165 KGIYISKTSPPVVREAVLSQFHEDFTWF-----LNARSGEVVPGCM 207
DB 119 SGKYVAGIYLP-----KPFSEDLSTSGDIKKPKIEYTVNKNIAIAPIKIDKA- 169
QY 208 VLLRGROCSDBSQCFTEWELMAIAELVSGQLEBCKIDTN-----IPSYASLE 262
DB 170 -----SSIQSIQITNEFFITASTL-----LKVNEIGYDIDTIVLSIN 207
QY 263 EVKDIVRDSFTDIHIGFPLDSVEMOE---NDKVRGSKFT---KVRATPEPI 313
DB 208 KVKDMILSTDE-NLDTIGYKQVLELOSQLEPEIKLANKANEFVDYIPKVDENGEKVA 266
QY 314 SNOGFEIMDKLYDKFTIIVSDLEAKLPKTSIILVLSKIDG 356
DB 267 LNDKMPLEKDAQ-----IILDQEKPIEIGNAKQLAIEDIG 303

RESULT 10
US-09-583-110-3100
Sequence 3100, Application US/09583110
Patent No. 6699703
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al.
TITLE OF INVENTION: Nucleic Acid and Amino Acid Sequences Relating to Streptococcus
FILE REFERENCE: PTH00-07A
CURRENT APPLICATION NUMBER: US/09/583,110
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/107,433
PRIOR FILING DATE: 1998-06-30
PRIOR APPLICATION NUMBER: US 60/085,131
PRIOR FILING DATE: 1998-05-12
PRIOR APPLICATION NUMBER: US 60/051,553
PRIOR FILING DATE: 1997-07-02
NUMBER OF SEQ ID NOS: 5322
SEQ ID NO 3100
LENGTH: 915
TYPE: PRT
ORGANISM: Streptococcus pneumoniae
US-09-583-110-3100

Query Match 5.5%; Score 101; DB 4; Length 915;
Best Local Similarity 20.3%; Pred. No. 0.23;
Matches 74; Conservative 62; Mismatches 130; Indels 98; Gaps 17;

QY 8 ESSYVQNSFTQVASMOPALENAVETLFSRDFHLQALNAADJCAAGPNTFAVISTIK 67
DB 2 EBNY--NLSITO-----IKNSIKR-----NSLVLVGAGISANSVLPWTWG 39
QY 68 RMMEKKREBLNC-----QTLQVYLANDLFGNDENTLFGKLSSEVINGKCEVPCYVMG 121

DB 40 ELIOGLKELNIPERTDSPRIAQYDYDTGKNQYT-----KXIBEI-FFKXG 87
QY 122 V--PQSFGRLPFRNSLHVSSYSVHMLTQAPKGLTSREGALANKKIYISKSPVVR 179
DB 88 LSKPELKLLEKIAKPIKIIITNYDSLLESQFESGLKRYNVAEDKDIPIYSS----- 140
QY 180 EAVLSQFHEDFTW-----FLNARSGEVVPGCMVLLRGROCSDBSD 221
DB 141 ERYLKHAGDPSKKNIVLAKEDDYDYLHNFPMISTLIOSLIMHTLFLV--GYSLS-D-ST 197
QY 222 MQSCFTWELMAIAELVSGQLEBCKIDTNPISYASLE---VKDIVRDSFTID 277
DB 198 FNSIF-----RMQNTFKLDAGN--AFYTPREPSMIREYKKGIGIFIS 241
QY 278 HIEGDLDSVEMOEKDKVRGSKFTKVRATPEPIISQFPEIMDKLYDKFTI--VSD 336
DB 242 NEENIGQETSEKQ-NKLYCRTRKDFLEVLSENRSODVNN-----ADDLNQLAFLDRLSF 294
QY 337 LEAK 340
DB 295 IDAK 298

RESULT 11
US-09-586-106D-161
Sequence 161, Application US/09586106D
Patent No. 6720479
GENERAL INFORMATION:
APPLICANT: Wright, David A.
APPLICANT: Voytas, Daniel F.
TITLE OF INVENTION: PLANT RETROELEMENTS AND METHODS RELATED THERETO
FILE REFERENCE: P-1065A
CURRENT APPLICATION NUMBER: US/09/586,106D
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: 60/087,125
PRIOR FILING DATE: 1998-05-29
PRIOR APPLICATION NUMBER: 09/322,478
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 190
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 161
LENGTH: 254
TYPE: PRT
ORGANISM: Pisum sativum
US-09-586-106D-161

Query Match 5.3%; Score 97.5; DB 4; Length 254;
Best Local Similarity 21.4%; Pred. No. 0.07;
Matches 42; Conservative 35; Mismatches 60; Indels 59; Gaps 9;

QY 15 SSTQOVASMAOPALENAVETLFSRDFHLQALNAADJCAAGPNTF--AVISTIKRMMEK 72
DB 97 SGYNQIVV-----APEDEKTAFTCPYGIYFAYRRMPFGLCNAAPATFORCMTSIFSDMLEK 151
QY 73 KRELCNCTLELQVYLAND--LFGNDENTLFGKLSSEVINGKCEVPCYVMGVGSGFHR 130
DB 152 -----YMKVFMDFSVFGSFDNCLANLS--LVLRQCELT----- 184
QY 131 FFRNSLHVSSYSVHMLTQAPKGLT-----SREGALANKKIYISKTSPPVRE----- 180
DB 185 -----NIVLWMEKHFVQ--BGLVGHKISHKIGIEVDKAKVAVIANLPPVNEKGIIRS 236
QY 181 -----AVLSQFHEDFT 191
DB 237 FLGHAGFYRRRIKDF 252

RESULT 12
US-08-496-944-2
Sequence 2, Application US/08496944
Patent No. 6040496
GENERAL INFORMATION:

```

; APPLICANT: Law, Marcus D
; APPLICANT: Dietz, Jon M
; TITLE OF INVENTION: Use of Translationally altered RNA to
; TITLE OF INVENTION: Confer Resistance to Maize Dwarf Mosaic Virus and Other
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CIBA-Geigy Corporation
; STREET: 7 Skyline Drive
; CITY: Hawthorne
; STATE: NY
; COUNTRY: USA
; ZIP: 10532
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30B
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/496,944
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Elmer, James Scott
; REGISTRATION NUMBER: 36,129
; REFERENCE/DOCKET NUMBER: CCC 1814
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2763 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-496-944-2

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Query Match
Best Local Similarity 5.3%; Score 97.5; DB 3; Length 2763;
Matches 73; Conservative 58; Mismatches 144; Indels 93; Gaps 17;

QY 5 GGGSSYAQNSFTQOVASMAQPALENAYE-TLFSRDFHLQALNAADIGCAAGPNTFAVI 63
DB 1972 GKVDKRLNRAAFIKISKAIRIYIGETIYDFRAVO-----RVV 2013
QY 64 STIKRMEKKC-----REINCOLEQVYNDLFQNDFTLFGKLS-----EVIGKCEE 114
DB 2014 NILKNVGMOCYVVDDEEIPRSINNAVGLYGGKKNYFENNSSDKEIYWRSCER 2073
QY 115 VPCYVWGV-PGSEFHRLPFRNSLH-----VHSSYSVH--- 146
DB 2074 INXQIGVWNGSLKAEIRIEKTMNKRRTTAAPLETLTGKVCVDDFNNOQFSSHLEG 2133
QY 147 -WLQAPK--GLTSEGLANKKIY-----ISKTSPPVVRREAYLS---QFHEDE--- 190
DB 2134 PWTVGITFEYGGWNLLEKLEPEGWVYCDADSGQDSSTLTPYLINAVALNIRLOFMEWDIG 2193
QY 191 -TMFLNARSQEV-----VPGCMVLLRGRCQSPDMQSCFTWELIAMAIAELVSGGLT 244
DB 2194 AQMLNLTETIYPIALPDGSIYKFKGNNSGQPSVTVDNTLMTIAFYNA-WLSSG-I 2251
QY 245 DEDKLDPTNINISYPASLEEVNDIYERDGSFTIDHIF-----GFDLDSVEHQENDKY- 295
DB 2252 KEEEDD--NCCRMFANGBDLLAVHPDFEFLIDBFQNHFNGLNFEFTSRTPDKSELWF 2309
QY 296 --VRGEK 301
DB 2310 MSTRGIKY 2317

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```

RESULT 13
US-09-586-106D-143
; Sequence 143, Application us/09586106D
; Patent No. 6720479
; GENERAL INFORMATION:
; APPLICANT: Wright, David A.

```

```

; APPLICANT: Voytes, Daniel F.
; TITLE OF INVENTION: PLANT RETROELEMENTS AND METHODS RELATED THERETO
; FILE REFERENCE: P-1065A
; CURRENT APPLICATION NUMBER: US/09/586,106D
; CURRENT FILING DATE: 2003-02-07
; PRIOR APPLICATION NUMBER: 60/087,125
; PRIOR FILING DATE: 1998-05-29
; PRIOR APPLICATION NUMBER: 09/322,478
; PRIOR FILING DATE: 1999-05-28
; NUMBER OF SEQ ID NOS: 190
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 143
; LENGTH: 254
; TYPE: PR
; ORGANISM: Glycine max
; US-09-586-106D-143

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Query Match
Best Local Similarity 5.1%; Score 94; DB 4; Length 254;
Matches 46; Conservative 32; Mismatches 76; Indels 54; Gaps 9;

QY 2 MNRGSSYAQNSFTQOVASMAQPALENAYETLFSRDFHLQALNAADIGCAAGPNTF- 60
DB 81 LERLAGSSYLLDYGSGYNQIADV--DQEKTAFTCFGVAYVRMSFGICNAPTFITQ 138
QY 61 AVISTIKRMEKKCREINCOLEQVYND--LFGNDFNTLFGKLSSEYIGKCEVPCY 118
DB 139 RCMAIFADVVKC-----IEVMDPSVFGASFENCANT--EKVLQRYE----- 183
QY 119 VMCVPGSFHRLPFRNSLHVHSSYSVHWLTQAPKGL-----TSREGALNKGKIYISK 173
DB 184 -----SNLVNMEKCHPMVQ--EGIMLGHKISRGIKVAKIEVIDK 224
QY 174 SPPV-----REAYLSQFHEFT 191
DB 225 LPPLVNVGRISFLGHARFRZFIIDFT 252

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RESULT 14
US-09-248-796A-26663
; Sequence 26663, Application US/09248796A
; Patent No. 6747137
; GENERAL INFORMATION:
; APPLICANT: Keith Weinstein et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN;
; FILE REFERENCE: 107196.132
; CURRENT APPLICATION NUMBER: US/09/248,796A
; CURRENT FILING DATE: 1999-02-12
; PRIOR APPLICATION NUMBER: US 60/074,725
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: US 60/096,409
; NUMBER OF SEQ ID NOS: 28208
; SEQ ID NO 26663
; LENGTH: 697
; TYPE: PR
; ORGANISM: Candida albicans
; US-09-248-796A-26663

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Query Match
Best Local Similarity 5.1%; Score 93.5; DB 4; Length 697;
Matches 44; Conservative 23; Mismatches 73; Indels 51; Gaps 8;

QY 57 PNTFAVISTIKRMEKKCREINCOLEQVYND--LFGNDF-----NTLFGK 102
DB 129 PNNPEI-----TDKNLEIYLUKTEBPQDTYRNRFIYKVPDVSYSGQTINLPSG 181
QY 103 LSESEVIGKCEVY-----CYWGVPGSF-----HGRLEFRNSLH 138
DB 182 LSONSQSSKCEDLSSSYSPDVSGPQNKNCIDLYKVLGKRLNNSSEYFQISLFLFKLXMTL 241
QY 139 VHSSYSVHWLTQAPKGL--TSREGALNKGKIYISKTS---PPVVRREAYLSQFHEFTMFL 194

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Db	242	VKKEIEKIMFOLIGSSVMLEQYGVHLMTRIRIFISSTGDKKPVVSLTYGVDFHEKREIE	301
Qy	195	NARSOEVVPG	205
Db	302	NV-ELIVPDG	310

RESULT 15
TIS-09-134

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US-09-134-001C-4434
: Sequence 4434, Application US/09134001C
: Patent No. 6380370
: GENERAL INFORMATION:
: APPLICANT: Lynn Doucette-Stamm et al
: TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
: TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
: FILE REFERENCE: GTC-007
: CURRENT APPLICATION NUMBER: US/09/134,001C
: CURRENT FILING DATE: 1998-08-13
: PRIOR APPLICATION NUMBER: US 60/064,964
: PRIOR FILING DATE: 1997-11-08
: PRIOR APPLICATION NUMBER: US 60/055,779
: PRIOR FILING DATE: 1997-08-14
: NUMBER OF SEQ ID NOS: 5674
: SEQ ID NO 4434
: LENGTH: 308
: TYPE: PRT
: ORGANISM: Staphylococcus epidermidis
US-09-134-001C-4434

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Query Match 5.0%; Score 93; DB 3; Length 308;

Matches 43; Conservative 32; Mismatches 59; Indels 48; Gaps 8;

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Oy 24 MAQPLLENAVE-----TLFSRDEHLALNADAGCAAGPNTFAVISTIKMMKKCR 75
Db 41 IAOPIISRAIKDIEAMVPFLDRS--KSLVLTDA-----KIFPKKCQ 83
Oy 76 ELNCCOTLEQVYVYNDLFGNDPNTLFGKLSSEVIGNKCEEVP CYMGVPGS FNGRLPFRNS 139
Db 84 EIIALYDNLPTIEINSLYGLJETHITISMSAVMSMR-----FIVGLGDFH-QLYVNIT 135
Oy 136 LHLVHSSISVHWLTOAPKGLTSREGALNKKGIYIKTSPPVVR EAV--LSQFHEDPMTF 193
Db 136 YNLIES-----GKTKTENILN-DEVDIVTTLPLVDHOKFECISLNKKELTIV 182
Oy 194 LN 195
Db 183 LN 184

```

Search completed: December 22, 2004, 09:25:09
Job time : 39 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 22, 2004, 09:24:28 ; Search time 143 Seconds
(without alignments)
890.834 Million cell updates/sec

Title: US-09-577-657a-1

Perfect score: 1847

Sequence: 1 FMNNGEGSSVAQNSSTFQQ.....LEAKLPKTSITLVLSKIDG 356

Scoring table:

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Gapop 10.0 , Gapext 0.5

Searched: 1589859 seqs, 357834939 residues

Total number of hits satisfying chosen parameters: 1589859

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
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11: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
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18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	732	39.6	367	US-10-425-114-62093	Sequence 62093, A
2	716.5	38.8	389	US-10-049-187-3	Sequence 3, Appli
3	716	38.8	370	US-10-310-154-528	Sequence 528, App
4	715.5	38.7	373	US-10-424-599-24081	Sequence 240381,
5	715.5	38.7	384	US-10-425-114-72594	Sequence 72594, A
6	713	38.6	359	US-10-049-187-6	Sequence 6, Appli
7	713	38.6	359	US-10-469-993-10	Sequence 10, Appli
8	664	36.0	354	US-10-424-599-19887	Sequence 19887,
9	664	36.0	354	US-10-425-114-55522	Sequence 55522, A
10	658.5	35.7	385	US-09-971-020-3	Sequence 3, Appli
11	658.5	35.7	385	US-10-802-773-3	Sequence 3, Appli
12	649.5	35.2	385	US-09-971-020-5	Sequence 5, Appli
13	649.5	35.2	385	US-10-802-773-5	Sequence 5, Appli

14	625.5	33.9	367	US-10-739-930-9052	Sequence 9052, Ap
15	624.5	33.8	367	US-10-424-599-15311	Sequence 15311,
16	621.5	33.6	364	US-10-469-993-14	Sequence 14, Appli
17	620.5	33.6	372	US-09-971-020-7	Sequence 7, Appli
18	620.5	33.6	372	US-10-623-854A-1	Sequence 1, Appli
19	620.5	33.6	372	US-10-802-773-7	Sequence 7, Appli
20	619.5	33.5	384	US-10-623-854A-7	Sequence 7, Appli
21	614	33.2	378	US-09-971-020-1	Sequence 1, Appli
22	614	33.2	378	US-10-802-773-1	Sequence 4, Appli
23	614	33.2	384	US-10-623-854A-4	Sequence 11831,
24	610	33.0	347	US-10-437-963-111831	Sequence 15932,
25	601	32.5	380	US-10-437-963-159332	Sequence 42992, A
26	587.5	31.8	401	US-10-767-701-42992	Sequence 120065,
27	583.5	31.6	373	US-10-437-963-130065	Sequence 203165,
28	583.5	31.5	378	US-10-437-963-203165	Sequence 529, App
29	582.5	31.5	382	US-10-310-154-529	Sequence 7553, Ap
30	581	31.5	385	US-10-739-930-7553	Sequence 332445,
31	578	31.3	405	US-10-425-115-332445	Sequence 16409,
32	575.5	31.2	375	US-10-437-963-196409	Sequence 530, App
33	575.5	31.2	382	US-10-310-154-530	Sequence 332449,
34	575	31.1	387	US-10-425-115-332449	Sequence 187792,
35	572.5	31.0	370	US-10-437-963-187792	Sequence 13528,
36	563	30.5	447	US-10-437-963-135287	Sequence 178540,
37	561	30.4	387	US-10-437-963-178540	Sequence 102652,
38	557	30.2	374	US-10-437-963-102652	Sequence 209793,
39	552	29.9	419	US-10-425-115-209793	Sequence 63764, A
40	550	29.8	382	US-10-425-114-63764	Sequence 18365,
41	547	29.6	365	US-10-437-963-128965	Sequence 264608,
42	522.5	28.3	240	US-10-425-115-264608	Sequence 170508,
43	521	28.2	345	US-10-437-963-170508	Sequence 163559,
44	515	27.9	365	US-10-437-963-163559	
45	492.5	26.7	366	US-10-437-963-163559	

ALIGNMENTS

RESULT 1
US-10-425-114-62093
; Sequence 62093, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
; FILE REFERENCE: 38-21(5313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 62093
; LENGTH: 367
; TYPE: PRT
; ORGANISM: Gossypium hirsutum
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3829-008-C2_FLI.pep
US-10-425-114-62093

Query Match 39.6%; Score 732; DB 15; Length 367;
Beet Local Similarity 43.3%; Pred. No. 3.8e-64;
Matches 149; Conservative 63; Mismatches 120; Indels 12; Gaps 5;
QY 2 MNRGEGSSVAQNSSTFQQVAAQPALENVETLFSRDFHQAALNADLGAAGPNTFA 61
DB 10 MGRGEGSSVAQNSSTFQQVAAQPALENVETLFSRDFHQAALNADLGAAGPNTFA 68
QY 62 VISTKRMKKKRELNQCTLELOYLNDLFGNDFTLFGKLSSEVGNKKEV----- 115
DB 69 AVSEIISIMYKNCCELGRSPLEFRVFENDLPGNDFNTIFOSLPA--FOEKLQOENGRKFG 126

RESULT 2
 US-10-049-187-3
 ; Sequence 3, Application US/10049187
 ; Publication No. US20030064895A1
 ; GENERAL INFORMATION:
 ; APPLICANT: CHOI, YANG-DO
 ; APPLICANT: CHEONG, JONG-JOO
 ; APPLICANT: LEE, JONG-SEOB
 ; APPLICANT: SONG, JONG-TAE
 ; APPLICANT: SONG, SANG-IK
 ; APPLICANT: SEO, HAK-SOO
 ; APPLICANT: KOO, YEON-JONG
 ; TITLE OF INVENTION: GENES FOR S-ADENOSYL, L-METHIONINE: JASMONIC ACID
 ; TITLE OF INVENTION: CARBOXYL METHYLTRANSFERASE AND A METHOD FOR THE
 ; TITLE OF INVENTION: DEVELOPMENT OF PATHOGEN- AND STRESS-RESISTANT PLANTS
 ; TITLE OF INVENTION: USING THE GENES
 ; FILE REFERENCE: 058333/0112
 ; CURRENT APPLICATION NUMBER: US/10/049,187
 ; CURRENT FILING DATE: 2002-06-13
 ; PRIOR APPLICATION NUMBER: PCT/KR01/00953
 ; PRIOR FILING DATE: 2001-06-05
 ; NUMBER OF SEQ ID NOS: 8
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 3
 ; LENGTH: 389
 ; TYPE: PRT
 ; ORGANISM: Arabidopsis thaliana
 US-10-049-187-3

	Query Match	38.8%	Score 716.5	DB 14	Length 389
	Best Local Similarity	39.3%	Pred. No. 1.5e-62		
	Match 148	Conservative 72	Identical 130	Indels 27	Gaps 5
QY	2	MNRGGESSYVKNSSFFTOQVAMAPALENAVETILFSPSDFHLQALINAADGCCAGPNTFA	61		
Db	9	MMKNGKGETSVANKNSSTAQSNITSLGRVNDKMLKTLMSNSEISIGIADLCSSGCPNLT	68		
QY	62	VISTIKRMKEKCEELANCOTLELOYLANDLRQNDPNTFLKGLSS-EYIGNKCEV----	115		
Db	69	SISNIVDITLHLCPLDRLRPVELKRVSLNDLPSNDPNYICSLPEFYRRVNNKKGELGFR	128		
QY	116	----PCYVMVGSGFPHGLFPRNSLIHLVHSSYSVYHMLTOAQKGLTSRGAL-----	166		
Db	129	GGGSCFVAIVGSGFYGRLLFPRRLHLPFHSSSLHMLISQVDCRAEKEDRTITADLENMG	188		
QY	167	KIYISKTSPPVVRKAYLISQFHEDFTWPLINAAQSEVPNGCAYLLIRGRQCSDFPDMSQCF	226		
Db	189	KIYISKTSPPSKAHKAYALQFQTDVFLVLRSRSELTVPGRNVTLFLGRRLSDPTTESCY	248		
QY	227	TWELIAAIAELVSGQLIDEDKLDLTNNIPSPALAEVKOIVBERDGSFTTIDHLEGFLLD-	285		
Db	249	QWELIAALPLSMMAKEGIIIEBKIDAFNAPYAASSEELKVIIEKGGSPSIDRLSPIDW	308		
QY	286	----SVEMQENDKWR-----GEKFTKYVRAATEPIIISNQGPELMDLYDKFTHIV	334		

Db	QY	Db
309	335	369
EGGSISESYDLAIRSKPALASGRVNTIRAVVEPMLEPTFGENWDELFFRYAKIVG	SDLEAKLEPKTTSIIIVL	EYFYVSSPRVAIVITSL
	: :	
	351	385

```

RESULT 3
US-10-310-154-528
Sequence 528, Application US/10310154
Publication No. US20030233670A1
GENERAL INFORMATION:
APPLICANT: Edgerton, Michael D
APPLICANT: Chomet, Paul S.
APPLICANT: Ruff, Thomas H
APPLICANT: Adams, Thomas G.
APPLICANT: Agarwal, Ameeta K.
APPLICANT: Ahrens, Jeffrey E.
APPLICANT: Ball, James A.
APPLICANT: Barni, G.
APPLICANT: Bell, Erin
APPLICANT: Boddupallil, Raghava
APPLICANT: Deikman, Jill
APPLICANT: Deng, Mojian
APPLICANT: Dong, Jinhua
APPLICANT: Duff, Stephen M.
APPLICANT: Galligan, Meghan M.
APPLICANT: Hinchey, Brenda S.
APPLICANT: Huang, Shihshieh
APPLICANT: Johnson, G. Richard
APPLICANT: Jung, Vincent
APPLICANT: Kretzmer, Keith A
APPLICANT: Laccetti, Lucille B.
APPLICANT: Lai, Chao-Qiang
APPLICANT: Lee, Gary
APPLICANT: Lin, Jie-Yi
APPLICANT: Liu, Jindong
APPLICANT: Lu, Bin
APPLICANT: Luethy, Michael M.
APPLICANT: Lund, Adrian
APPLICANT: Madson, Linda L.
APPLICANT: Malloy, Kathleen A.
APPLICANT: McKel, Christine L.
APPLICANT: Miller, Philip W.
APPLICANT: Padmavathi, ManchiKanti
APPLICANT: Parnell, Laurence D.
APPLICANT: Start, William G.
APPLICANT: Tennessen, Dan
APPLICANT: Vidya, K.R.
APPLICANT: Wang, Haiyun
APPLICANT: Wang, Haiyun
APPLICANT: Xin, Zhanqun
APPLICANT: Xu, Nanfei
APPLICANT: Yang, Chunzhi
APPLICANT: Zeng, Xiaoping
APPLICANT: Zhang, Qiang
APPLICANT: Zhao, Yajuan
APPLICANT: Zhou, Li
TITLE OF INVENTION: Gene Sequences and Uses Thereof in Plants
FILE REFERENCE: 38-15(52796)B
CURRENT APPLICATION NUMBER: US/10/310.154
PRIOR FILING DATE: 2002-12-04
PRIOR APPLICATION NUMBER: 60/337,358
PRIOR FILING DATE: 2001-12-04
NUMBER OF SEQ ID NOS: 736
SEQ ID NO 528
LENGTH: 370
TYPE: PRT
ORGANISM: Glycine max
US-10-310-154-528

```

Query Match	38.8%	Score 716;	DB 14;	Length 370;
Best Local Similarity	39.6%	Pred. No. 1.5e-62;		
Matches 147;	Conservative 72;	Mismatches 122;	Indels 30;	Gaps 6;

```

QY      2  NNRGGESSEYKONSSFTQOVASMAQPALENNVELTFSRDFHLOALNADIGCAAGPPTFA  61
Dd      9  MNGVGHASVYANNSELQOKVICTLPTIREBAITSLYCTVP-RSLAVADLCSSGGPNTLL  67
QY      62  VISTIKRMMEKKCHELNCQLELQVYLLNDLPGDNFNTLFGKLSSEVIGNKCEV-----P  116
Dd      68  VVSEIRIKIVELTCHRELHNKSPPEYKVFLLNDLPGDNFNNTFKSLDS-FKKXLCDEMESIGCP  126
QY      117  CYMNGCVPGSFHGRLEFPNRSIHLVHSSYSVHMLTQAPKGLTREGALANKKITIYSKTSPP  176
Dd      127  CYFSGVPGSPFGGRVFPNGOSLHFVHSSYSLSHMLSKVPEVDN-----NRGVNYIGSTSP  180
QY      177  VVREAYLSQPFEDPFMFNLNARSQEVVPNGCVLLILRGROCSDPSPDMSCTFWELLMAAIA  236
Dd      181  NVARAYVEQFORDSFLKCRPAEBELVKGGRVLTFLGRSDPSPKOGGYWELMAATRLN  240
QY      237  ELVSGGLIDEDKLDTFNIPSYFASLEBYKDIVERDGSFTTIDHIEGFIDLSVEMOENDKRV  296
Dd      241  DMLVGGIIKEBQDLTFNIPLYTPSPSEVKLEVLKESGPSASRLE---VSEVNMNAFPDMN  297
QY      297  R-----GEKFTVYVRAFTPEPITISNOGEPIMDKLYDKFTHIVVSDLEAKLP  342
Dd      298  ALEPESERDPTLSDGVYVAAQCMRAVABPMLVSHGGEALIEEVFSRYQOILITDRMSKEOT  357
QY      343  KTTSLIIVLWK 353
Dd      358  KCINVTYVLLTR 368

```

```

RESULT 4
US-10-424-599-240381
: Sequence 240381, Application US/10424599
: Publication NO. US20040031072A1
: GENERAL INFORMATION:
: APPLICANT: La Rosa Thomas J
: APPLICANT: Kovallie David K
: APPLICANT: Zhou Yihua
: APPLICANT: Cao Yongwei
: TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
: FILE REFERENCE: 38-21(53223)B
: CURRENT APPLICATION NUMBER: US/10/424,599
: CURRENT FILING DATE: 2003-04-28
: NUMBER OF SEQ ID NOS: 285684
: SEQ ID NO 240381
: LENGTH: 373
: TYPE: PRT
: ORGANISM: Glycine max
: FEATURE:
: OTHER INFORMATION: Clone ID: PAT_MRT3847_59091C.1.pep
: US-10-424-599-240381

```

	Query Match	38.7%	Score 715.5	DB 15	Length 373
	Best Local Similarity	41.0%	Pred. No. 1.7e+62		
	Matches 154	Conservative 72	Mismatches 113	Indels 37	Gaps 8
Qy	2	MNRGEGSSVYANSSSFTQVAVSMAOPALENAVETLFSRDFHLQALNPAADLGCAGNTFA	61		
Db	9	MNGSGGSESYANSSLVQOKVILFLTKGMBEALISLSY-RSMLPRSLAVADLGCSSGNTFF	67		
Qy	62	VISTIKRMMKKCRELNCOITLELYVYNDLPENDNTLPKGLSS--EVLGNCKEEV----	115		
Db	68	VISEAIKSEVKLCRELNHOSPEYQIYMNDDPNDFNNTKSLDSFEKCKNELIEHGCI	127		
Qy	116	-PCYVMGVPGVSFEGRLPPRNSLHLVHSYSVHMLTOAPKGLTSRBLALNKGKIYSKTS	174		
Db	128	GSCFENGVPSPFYGRILPPTKSLHPVHSSYSLLMWLSKVPDGVEN-----NKNITVASTS	181		
Qy	175	PPVVAEATLSQCHDFPTFMFLNARSQEVVPGNCMLILRRQCSDPBDMQSCFTWELMAA	234		
Db	182	SLNVLKAYVEOYQKQPSFLKCRABEIVEGGRKVLVFLGRSRDDRSKCCYIWEELAA	241		

[illegible]

```

RESULT 5
US-10-425-114-72594
: Sequence 72594, Application US/10425114
: Publication NO. US2004003488A1
: GENERAL INFORMATION:
: APPLICANT: Liu, Jinding
: APPLICANT: Zhou, Yihua
: APPLICANT: Kovalic, David K.
: APPLICANT: Screen, Steven B
: APPLICANT: Tabaska, Jack E
: APPLICANT: Cao, Yongwei
: TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
: TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
: FILE REFERENCE: 38-21(5313)B
: CURRENT APPLICATION NUMBER: US/10/425,114
: CURRENT FILING DATE: 2003-04-28
: NUMBER OF SEQ ID NOS: 73128
: SEQ ID NO 72594
: LENGTH: 384
: TYPE: PRT
: ORGANISM: Glycine max
: FEATURE:
: OTHER INFORMATION: Clone ID: LIB3030-012-H10_F11.pep
US-10-425-114-72594

```

Query Match	38.7%	Score 715.5	DB 15	Length 384
Best Local Similarity	41.0%	Pred. No. 1,8e-62		
Matches 154	Conservative 72	Mismatches 113	Indels 37	Gaps 8
Qy	2	MNRGESSYAONSSFTQOVASMAQPALENVETLFSRPHLQALNADIGCAAGPNTFA	61	
Db	20	MNCGSETSYAANNLSLQCKVIFLTGKMBEBAISILY-RSMLPRSLAVADIGCSSGPTTF	78	
Qy	62	VISTIKRMMEKKCRELNCQTLEQYVYIYNDLFGNDPNTLFFKLS--EVIKNCEEV----	115	
Db	79	VISEAIKSYEKKCRELNMHQSPEYQIYMDLPGNFPNNIFKSLDSFFKRLCNEIIEAGGT	138	
Qy	116	-PCYVAGVGSFPHGRLEFPNSSLHLVHSSVYHMLTQAPKGLTSREGALNKGIIYSIKTS	174	
Db	139	GSCFFNGVGSFYGRFLFPKSLHFPHSSYSLSMLSKPDVGEN-----KKGNIYMASTS	192	
Qy	175	PVYREAYVLSQFHEDFETFLNARSGEVVPNGCVLILRGRCSPSDMSQCFTEWELIAMA	234	
Db	193	SLNVLAAVYEQYOKPFSFLFKRAEIIYEGGRMVLTLFGRSDRSRSECCYIEMLAMA	252	
Qy	235	IABLVSQGLIDEDKDTFNIPISFYFSLBEVMDIVERDQSPFIHDIE-----G	281	
Db	253	LNDMWSKGIILKEBQMDTFNIPQYLTSPSEVVFSEVQKESGSEFITSLEVTVPVPMNAYDNGNA	312	
Qy	282	FDLD---SVEMQENDKMWAGEKFTFVVAFTPEPILISNOGPEIMDKLYDKFTHIVSDLE	338	
Db	313	FDSECGLSLSLNSG-----GYNVTKCMAYVAPEPLVSHFGBAIIEBFVSRYOQILTERMS	367	
Qy	339	AKLPKTTSLIIVLSKI	354	
Db	368	KE--KTEFVNAVITSMI	381	

RESULT 6
US-10-049-187-6

```

; Sequence 6, Application US/10049187
; Publication No. US20030064895A1
; GENERAL INFORMATION:
; APPLICANT: CHOI, YANG-DO
; APPLICANT: LEE, JONG-JOO
; APPLICANT: LEE, JONG-SEOB
; APPLICANT: SONG, JONG-TAE
; APPLICANT: SONG, SANG-UK
; APPLICANT: SEO, HAK-SEO
; APPLICANT: KOO, YEON-JONG
; TITLE OF INVENTION: GENES FOR S-ADENOSYL L-METHIONINE: JASMONIC ACID
; TITLE OF INVENTION: CARBOXYL METHYLTRANSFERASE AND A METHOD FOR THE
; TITLE OF INVENTION: DEVELOPMENT OF PATHOGEN- AND STRESS-RESISTANT PLANTS
; FILE REFERENCE: 05833/0112
; CURRENT APPLICATION NUMBER: US/10/049,187
; PRIOR FILING DATE: 2002-06-13
; PRIOR APPLICATION NUMBER: PCT/KR01/00953
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 359
; TYPE: PRT
; ORGANISM: Clarkia breweri
US-10-049-187-6

```

```

Query Match      38.6%; Score 713; DB 14; Length 359;
Best Local Similarity 41.5%; Pred. No. 2.9e-62;
Matches 152; Conservative 68; Mismatches 110; Indels 36; Gaps 8;

```

```

QY 2 MNRGEGSSYAONSSTFOQVASMOPALENAVETLFSRDFHLQALNADLGCAGPNT-F 60
DB 9 MKGAGENSYAMNSFIQOVISTKPTSAITATYSGDVTTRIALADLGCSSGPALNF 68
QY 61 AV---ISTIKRMMEKKREINCOLELOVYINDLFGNDPNTLFGKLSSEVIGKCEBPC 117
DB 69 AVTELKIVEELRKKMGRE--NSPEYQIFLNDLFGNDPNTLFGKLSSEVIGKCEBPC 117
QY 118 YVWGVSFGHRLFPNLSHLVHSSYSVHWLTOAPKGLTSREGALNKGKIYISKTSPPV 177
DB 122 FINGVPSFGYGRLPFRNTLHFHSSYSLSMWLSQVPIGIES-----NKGNIYANTCPQS 175
QY 178 VREAVLSQFHEDFTMFNARSQEVVPGCMVLLIRGQCSPEQSCFTWEILAMALAE 237
DB 176 VLNAYYKQFOEDHALFLRCRAQEVVPGGRVLTILGRSEDRASTECCLIMQILMALNQ 235
QY 238 LVSQGLIDEDKLDTPNIPSYFASLEEVKQDIVERDGSFTTIDHIEGFDL-----D 285
DB 236 MVSQGLIEBKDKMKNIPQYTPSPTEVEALIKESGFLDHIIEASITWSSCTKDGDCG 295
QY 286 SVEMQENDKVRBKEFTKVVRAFTPEPIISNOGPEIMDKLYKFTHIVVSDLEAKLPKTT 345
DB 296 SVEER-----GYNVACMRVAVAEPILLDHFGAIIEDVFHRYKLLIIRMSKEKTKFI 348
QY 346 SIIIVL 351
DB 349 NVIVSL 354

```

```

RESULT 7
US-10-469-993-10
; Sequence 10, Application US/10469993
; Publication No. US20040078847A1
; GENERAL INFORMATION:
; APPLICANT: Paldi, Nitzan
; TITLE OF INVENTION: METHOD OF ENHANCING ENTOMOPHILIOUS
; FILE REFERENCE: 26678
; CURRENT APPLICATION NUMBER: US/10/469,993
; CURRENT FILING DATE: 2003-09-16
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 10

```

```

; LENGTH: 359
; TYPE: PRT
; ORGANISM: Clarkia breweri
US-10-469-993-10

```

```

Query Match      38.6%; Score 713; DB 15; Length 359;
Best Local Similarity 41.5%; Pred. No. 2.9e-62;
Matches 152; Conservative 68; Mismatches 110; Indels 36; Gaps 8;

```

```

QY 2 MNRGEGSSYAONSSTFOQVASMOPALENAVETLFSRDFHLQALNADLGCAGPNT-F 60
DB 9 MKGAGENSYAMNSFIQOVISTKPTSAITATYSGDVTTRIALADLGCSSGPALNF 68
QY 61 AV---ISTIKRMMEKKREINCOLELOVYINDLFGNDPNTLFGKLSSEVIGKCEBPC 117
DB 69 AVTELKIVEELRKKMGRE--NSPEYQIFLNDLFGNDPNTLFGKLSSEVIGKCEBPC 117
QY 118 YVWGVSFGHRLFPNLSHLVHSSYSVHWLTOAPKGLTSREGALNKGKIYISKTSPPV 177
DB 122 FINGVPSFGYGRLPFRNTLHFHSSYSLSMWLSQVPIGIES-----NKGNIYANTCPQS 175
QY 178 VREAVLSQFHEDFTMFNARSQEVVPGCMVLLIRGQCSPEQSCFTWEILAMALAE 237
DB 176 VLNAYYKQFOEDHALFLRCRAQEVVPGGRVLTILGRSEDRASTECCLIMQILMALNQ 235
QY 238 LVSQGLIDEDKLDTPNIPSYFASLEEVKQDIVERDGSFTTIDHIEGFDL-----D 285
DB 236 MVSQGLIEBKDKMKNIPQYTPSPTEVEALIKESGFLDHIIEASITWSSCTKDGDCG 295
QY 286 SVEMQENDKVRBKEFTKVVRAFTPEPIISNOGPEIMDKLYKFTHIVVSDLEAKLPKTT 345
DB 296 SVEER-----GYNVACMRVAVAEPILLDHFGAIIEDVFHRYKLLIIRMSKEKTKFI 348
QY 346 SIIIVL 351
DB 349 NVIVSL 354

```

```

RESULT 8
US-10-424-599-198827
; Sequence 198827, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J
; APPLICANT: Kovalic, David K
; APPLICANT: Zhou, Yihua
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 198827
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_21565C.1.pep
US-10-424-599-198827

```

```

Query Match      36.0%; Score 664; DB 15; Length 354;
Best Local Similarity 37.8%; Pred. No. 2.3e-57;
Matches 136; Conservative 80; Mismatches 128; Indels 16; Gaps 5;

```

```

QY 2 MNRGEGSSYAONSSTFOQVASMOPALENAVETLFSRDFHLQALNADLGCAGPNT-F 61
DB 1 MNSGKGRSYAMNSMORUKMTKNGKIIIEBTI--TRFYSYSSCKKVVADLGSVGNITLL 59
QY 62 VISTIKRMMEKKREINCOLELOVYINDLFGNDPNTLFGKLSSEVIGKCEBPC 115
DB 60 VISITIDIVTCTTRINQBPPTFQFYINDLFGNDPNTLFGKLSSEVIGKCEBPC 118

```

```

QY 116 PCYVWGVSGPSFHGRLEPPRRSLHLVHSSYSVHMLTQAPKGLTSEGLAKKGIYKSTP 175
DB 119 -CFINATPSSFHGRLEPPNNSINLPHSANSLSHMLSDOPLLETTAEASFNGKHCHIVSTP 177
QY 176 PVRREAVYLSQFHEDEFTMFPLNARSQOEVPVPGCWLLIRGRQCSPPSMQSCFTWELLAMA1 235
DB 178 PAVYQAYLKQFOQDFRFLKRSSEBELVPGGANVLLFLGK-----NTHRTGTGEIISLVJ 232
QY 236 AELVSGGLIDEDKLDPTFNIPSYFASLEEVYKDIVERDGSFTTIHIEGFDL--DSVEMQEND 293
DB 233 NDMLEGLIEEEKLSDSFNIPVYEPTVEIRRHVYQEGSFFLOOLELILPIMDEGLINEGYD 292
QY 294 KVRREKFTKVVRAFTPEPIISNOFGEINDKLYDKETHIVSDLEAKLRTKTSIILVLK 353
DB 293 ANIKQAFMAKVARAIIMEPLLSAKFGREVIIEFIRREKKLAQMLEVEKLESTTFVISMTR 352

RESULT 9
US-10-425-114-55522
; Sequence 55522, Application US/10425114
; Publication No. US2004003488BA1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingsong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 55522
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: UC-GMPMINSOY090F11_FLI.psp
US-10-425-114-55522

Query Match 36.0%; Score 664; DB 15; Length 354;
Best Local Similarity 37.8%; Pred. No. 2.3e-57;
Matches 136; Conservative 80; Mismatches 128; Indels 16; Gaps 5;

QY 2 MNRGGESESYAONSSSTQOVASMAQALENAVETLRSRPHQLALNAADLGCAGNTTA 61
DB 1 MNSGGERSYANNMQLORLMTKGKILBETI-TRYSYNSPBCMKVADGSGVGNTLL 59
QY 62 VISTKRMMEKKCRELNQCTLELOVYLANDLFGNDPFTLLFKGLS-----SEVIGNCEBY 115
DB 60 VISNIIDIVDTTCRLNQPPTFPQFLYLANDLFGNDPFTTKSLPDPFKRLDEDEKGHKFGS 118
QY 116 PCYVWGVSGPSFHGRLEPPRRSLHLVHSSYSVHMLTQAPKGLTSEGLAKKGIYKSTP 175
DB 119 -CFINATPSSFHGRLEPPNNSINLPHSANSLSHMLSDOPLLETTAEASFNGKHCHIVSTP 177
QY 176 PVRREAVYLSQFHEDEFTMFPLNARSQOEVPVPGCWLLIRGRQCSPPSMQSCFTWELLAMA1 235
DB 178 PAVYQAYLKQFOQDFRFLKRSSEBELVPGGANVLLFLGK-----NTHRTGTGEIISLVJ 232
QY 236 AELVSGGLIDEDKLDPTFNIPSYFASLEEVYKDIVERDGSFTTIHIEGFDL--DSVEMQEND 293
DB 233 NDMLEGLIEEEKLSDSFNIPVYEPTVEIRRHVYQEGSFFLOOLELILPIMDEGLINEGYD 292
QY 294 KVRREKFTKVVRAFTPEPIISNOFGEINDKLYDKETHIVSDLEAKLRTKTSIILVLK 353
DB 293 ANIKQAFMAKVARAIIMEPLLSAKFGREVIIEFIRREKKLAQMLEVEKLESTTFVISMTR 352

RESULT 10
US-09-971-020-3

```

```

; Sequence 3, Application US/09971020
; Patent No. US20020106143A1
; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Koizumi, No. US20020106143A1ommu
; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the Gene
; TITLE OF INVENTION: Encoding Said Polypeptide
; FILE REFERENCE: 026350-068
; CURRENT APPLICATION NUMBER: US/09/971.020
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: JP 2000-307,149
; PRIOR FILING DATE: 2000-10-06
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 385
; TYPE: PRT
; ORGANISM: Coffea arabica
US-09-971-020-3

Query Match          35.7%; Score 658.5; DB 9; Length 385;
Best Local Similarity 38.2%; Pred. No. 9,1e-57;
Matches 150; Conservative 74; Mismatches 106; Indels 63; Gaps 11;

QY      2 MNRGEGSSVYQNSSEFTQOVASMAQPALENVETLPSRDFH--LQALNADLGCAGPNT 59
DB      9 MNGGEGEASVAKNSSEFNQVLAKVPRVLEOCVRELLRANLPNINKICIKVADLGCASGPNT 68
QY      60 ----FAVISTIKRMMEKKCRELNCOTLEQVYVLYNDLFGNDPFTLFGKLS----- 105
DB      69 LTTVDVYQSIDKVAQCKNELERPT--IQVFLTDLFQDNFVSVMMLPSFPRKLEKNG 126
QY      106 EVIGNKCEEVYCVYWGVPSPFGHGLFPNNLSLTHVSSYSVHMLTQAPKGLTSREGALNK 165
DB      127 RKIGS-----CLIAAMGSPFHGRLPFPESNMFHLSSSLQGLQVPSGLVLELGTANK 180
QY      166 GKVIYKSTSPVPRERAYVLSQFHEDFTMLNARSGQEVNPGCVL--ILRGROCCSPSDMQ 223
DB      181 RSIYSSKASPPPVQAKYADQFTKQFTFLRMSEBELSRGRMLTLCICGKDCDGPN--- 237
QY      224 SCFTMELAMIAELVSGGLDEDKLDFNTPSYASLSLEYVDYEROSFTIDHIEGPD 263
DB      238 ---TWDLLEMAINDLVAEGRGEBEKLDFNVPFIYASVEEYVACWEEBSFELVLYQTPK 294
QY      284 L-----DSVENOE-----NDKRVGGEKFTKVRVAFTEPIISNOFSPBIMDKLYDKF 329
DB      295 LRYDAGFSIDDDCCQVRSHSPYISDEHAAAHAVASIRSRYEFTILASHGEALIPDLFHRF 354
QY      330 -----THIVSDLEAKLPKTTSI 347
DB      355 ATNAKAVIRLGKGFYNNLIIS--LAKKREKSDI 385

RESULT 11
; US-10-802-773-3
; Sequence 3, Application US/10802773
; Publication No. US20040154055A1
; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Koizumi, Nozomu
; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the
; TITLE OF INVENTION: Gene Encoding Said Polypeptide
; FILE REFERENCE: 026350-091
; CURRENT APPLICATION NUMBER: US/10/802,773
; CURRENT FILING DATE: 2004-03-18
; PRIOR APPLICATION NUMBER: JP 2000-307,149
; PRIOR FILING DATE: 2000-10-06
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 385

```

```

; TYPE: PRT
; ORGANISM: Coffea arabica
US-10-802-773-3

Query Match      35.7%; Score 658.5; DB 16; Length 385;
Best Local Similarity 38.2%; Pred. No. 9.1e-57;
Matches 150; Conservative 74; Mismatches 106; Indels 63; Gaps 11;

QY 2 MNRGEGSSYAQNSSFTQOVASMAQPALENVETLFSRDFH--LQALNAADLGCAGPNT 59
DB 9 MNGGEGASAYAKNSSFNQVLAKVKPVLEQCVGELLRLANLPINIKCIKIVADLGCAGPNT 68
QY 60 ---FAVISTIKRMMEKKCRELNQCTLE--LOYVLNDLFGNDFTLTKGLSS----- 105
DB 69 LITVMDVQSIDKVGEMKNELERP--IQVFLTDLFQNDFNVSVMMLPSFRKLEKENG 126
QY 106 EYGNKCEVPYCVWGVPSFHGRLFPNNSLHLVHSSYSVHMLTQAPKGLTSREGALANK 165
DB 127 RKIGS-----CLIAMPGSFHGRLPFESMHFLHSSYSLOFLSQVPSGLVTELGITANK 180
QY 166 GKIIYSKTSPPVREAYLSQFHEDFTMFLNARSQEVVPGCVL--ILRGQCSPSDMQ 223
DB 181 RSIYSSKASPPVQKAYLDQFTKDTTFLRMSEBLSRGRMLTCTCKGDECDGPN--- 237
QY 224 SCFTWELLAMALAEVSOGLIDEDKLTDFNIPSYFASLEEVKDIYERDGSFTIDHIEGFD 283
DB 238 ---TMDLLEMAINDLVAEGRLEKLDSPNVPIYASVBEVKCVVEEGSFELVLOQFK 294
QY 284 L-----DSVENQ-----NDKRVGGEKTKVRAFTPEPIISNOGPEIMDKLYDKF 329
DB 295 LRYDAGFSIDDCQVRSHSPVSDHARAHAVALRSVYEPIILASHGEMAIIPDIFHRF 354
QY 330 -----THIVSDLEAKLPKTTSI 347
DB 355 ATNAKVIRLKGKGFYNNLIIS--LAKKEKSDI 385

RESULT 12
US-09-971-020-5
; Sequence 5, Application US/09971020
; Patent No. US20020108143A1
; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Koizumi, No. US20020108143A1om
; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the Gene
; FILE REFERENCE: 026350-068
; CURRENT APPLICATION NUMBER: US/09/971.020
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: JP 2000-307,149
; PRIOR FILING DATE: 2000-10-06
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 385
; TYPE: PRT
; ORGANISM: Coffea arabica
US-09-971-020-5

Query Match      35.2%; Score 649.5; DB 9; Length 385;
Best Local Similarity 38.5%; Pred. No. 7.3e-56;
Matches 151; Conservative 71; Mismatches 109; Indels 61; Gaps 11;

QY 2 MNRGEGSSYAQNSSFTQOVASMAQPALENVETLFSRDFH--LQALNAADLGCAGPNT 59
DB 9 MNGGEGASAYAKNSSFNQVLAKVKPVLEQCVGELLRLANLPINIKCIKIVADLGCAGPNT 68
QY 60 FAVISTIKRMMEKKCRELNQCTLE--LOYVLNDLFGNDFTLTKGLSS-----E 106
DB 69 LITVMDVQSIDKVRQEMK--NELERPTIQVFLTDLFQNDFNVSVMMLPSFRKLEKENG 127
QY 107 VIGNKCEVPYCVWGVPSFHGRLFPNNSLHLVHSSYSVHMLTQAPKGLTSREGALANK 166

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DB 128 KIGS-----CLIAMPGSFHGRLPFESMHFLHSSYSLOFLSQVPSGLVTELGITANK 181
QY 167 KIYISKTSPPVREAYLSQFHEDFTMFLNARSQEVVPGCVL--ILRGQCSPSDMQ 224
DB 182 SIYSSKASPPVQKAYLDQFTKDTTFLRIRSEBLSRGRMLTCTCKGDEFDGPN----- 237
QY 225 CFTWELLAMALAEVSOGLIDEDKLTDFNIPSYFASLEEVKDIYERDGSFTIDHIE---- 280
DB 238 ---TMDLLEMAINDLVAEGRLEKLDSPNVPIYASVBEVKCVVEEGSFELVLETKL 295
QY 281 ---GFPLD-----SVENQENDKRVGGEKTKVRAFTPEPIISNOGPEIMDKLYDKF- 329
DB 296 RYDAGFSIDDCQVRSHSPVSDHARAHAVALRSVYEPIILANHFGEALIPDIFHRFA 355
QY 330 -----THIVSDLEAKLPKTTSI 347
DB 356 TNAKVIRLKGKGFYNNLIIS--LAKKEKSDI 385

RESULT 13
US-10-802-773-5
; Sequence 5, Application US/10802773
; Publication No. US20040154055A1
; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Koizumi, Nozomu
; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the
; FILE REFERENCE: 026350-091
; CURRENT APPLICATION NUMBER: US/10/802.773
; CURRENT FILING DATE: 2004-03-18
; PRIOR APPLICATION NUMBER: JP 2000-307,149
; PRIOR FILING DATE: 2000-10-06
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 385
; TYPE: PRT
; ORGANISM: Coffea arabica
US-10-802-773-5

Query Match      35.2%; Score 649.5; DB 16; Length 385;
Best Local Similarity 38.5%; Pred. No. 7.3e-56;
Matches 151; Conservative 71; Mismatches 109; Indels 61; Gaps 11;

QY 2 MNRGEGSSYAQNSSFTQOVASMAQPALENVETLFSRDFH--LQALNAADLGCAGPNT 59
DB 9 MNGGEGASAYAKNSSFNQVLAKVKPVLEQCVGELLRLANLPINIKCIKIVADLGCAGPNT 68
QY 60 FAVISTIKRMMEKKCRELNQCTLE--LOYVLNDLFGNDFTLTKGLSS-----E 106
DB 69 LITVMDVQSIDKVRQEMK--NELERPTIQVFLTDLFQNDFNVSVMMLPSFRKLEKENG 127
QY 107 VIGNKCEVPYCVWGVPSFHGRLFPNNSLHLVHSSYSVHMLTQAPKGLTSREGALANK 166
DB 128 KIGS-----CLIAMPGSFHGRLPFESMHFLHSSYSLOFLSQVPSGLVTELGITANK 181
QY 167 KIYISKTSPPVREAYLSQFHEDFTMFLNARSQEVVPGCVL--ILRGQCSPSDMQ 224
DB 182 SIYSSKASPPVQKAYLDQFTKDTTFLRIRSEBLSRGRMLTCTCKGDEFDGPN----- 237
QY 225 CFTWELLAMALAEVSOGLIDEDKLTDFNIPSYFASLEEVKDIYERDGSFTIDHIE---- 280
DB 238 ---TMDLLEMAINDLVAEGRLEKLDSPNVPIYASVBEVKCVVEEGSFELVLETKL 295
QY 281 ---GFPLD-----SVENQENDKRVGGEKTKVRAFTPEPIISNOGPEIMDKLYDKF- 329
DB 296 RYDAGFSIDDCQVRSHSPVSDHARAHAVALRSVYEPIILANHFGEALIPDIFHRFA 355
QY 330 -----THIVSDLEAKLPKTTSI 347

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Db 356 TNAKVIRLKGKGFNNLIIS--LAKKPEKSDI 385

RESULT 14

US-10-739-930-9052

Sequence 9052, Application US/10739930

Publication No. US20040216190A1

GENERAL INFORMATION:

APPLICANT: Kovalic, David K.

TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH

TITLE OF INVENTION: PLANTS AND USES THEREOF FOR PLANT IMPROVEMENT

FILE REFERENCE: 38-21(53377)B

CURRENT APPLICATION NUMBER: US/10/739,930

CURRENT FILING DATE: 2003-12-18

NUMBER OF SEQ ID NOS: 11088

SEQ ID NO 9052

LENGTH: 367

TYPE: PRT

ORGANISM: Glycine max

FEATURE:

OTHER INFORMATION: Clone ID: GLYMA-23APR03-C34757_1.p

US-10-739-930-9052

Query Match 33.9%; Score 625.5; DB 17; Length 367;
Beet Local Similarity 37.0%; Pred. No. 1.7e-53;
Matches 132; Conservative 81; Mismatches 139; Indels 5; Gaps 3;

QY 2 MNRGGEBSYVANSFTQOVASMAQPALENVETLFSRDFHQLNALNADLCCAGPNTFA 61

DB 12 MTGGVGKTSYANKNSLQKESDVKHIIQVBEELYATT-PSIGIDLCSSGPNLTS 70

QY 62 VISTIKRMMEKKRELNCQTLLEYLNDLPNDNTLFGKL---SSVIGNKCEVPCY 118

DB 71 IIKDIFQAIQGISHRIMHSTEFRYFNDLPNTDNSTFKAIPEFQNLRODRKNGFPSI 130

QY 119 VM-GVPGSFHGRLEPRNSLHLVHSSYSVHMLTOAPKGLTSREGALNKGKIYISKTSPPV 177

DB 131 FMGGYFGSFGRLFPNSYLHFWHSSYSLHWSRVLPALYDEHKRPLNKGCVYICSSPEV 190

QY 178 VREAVLSQFHEDFTWFLNARSQEVVPGNCVTLIRGQCDSPDMQSCFTWELLMATAE 237

DB 191 VSOAYYQFOEDFSLFLRSRSEELVVGGRVLIPLGRGPEHVDHGRNSFFWEILSRFAI 250

QY 238 LVSGGLIDEDKLDTFNIPSYFASLEVKDIVERDGSFTIDHIEGFDLDSVEMQENDKVR 297

DB 251 LVSGEIEOEKFDSDYDFHFAPSRSEIEEVRKESGLKMERLEMFEMDKSNNEHSSSESY 310

QY 298 GEKPTKVVRAPTEPIISNQFGPEIMDKLYDKFTHIVVSDLEAKLPKTSIILVLSKI 354

DB 311 GTQVAVAVRAIQESWISHHFGEGILSLFENYARLVDEMAKEDIRPISFVLVLRKI 367

RESULT 15

US-10-424-599-153131

Sequence 153131, Application US/10424599

Publication No. US20040031072A1

GENERAL INFORMATION:

APPLICANT: La Rosa Thomas J

APPLICANT: Kovalic David K

APPLICANT: Zhou Yihua

APPLICANT: Cao Yongwei

TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

FILE REFERENCE: 38-21(53223)B

CURRENT APPLICATION NUMBER: US/10/424,599

CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 285684

SEQ ID NO 153131

LENGTH: 367

TYPE: PRT

ORGANISM: Glycine max

FEATURE:

OTHER INFORMATION: Clone ID: PAT_MRT3847_109300C.1.pep

US-10-424-599-153131

Query Match 33.8%; Score 624.5; DB 15; Length 367;
Beet Local Similarity 36.4%; Pred. No. 2.1e-53;
Matches 130; Conservative 83; Mismatches 139; Indels 5; Gaps 3;

QY 2 MNRGGEBSYVANSFTQOVASMAQPALENVETLFSRDFHQLNALNADLCCAGPNTFA 61

DB 12 MTGGVGKTSYANKNSLQKESDVKHIIQVBEELYATT-PSIGIDLCSSGPNLTS 70

QY 62 VISTIKRMMEKKRELNCQTLLEYLNDLPNDNTLFGKL---SSVIGNKCEVPCY 118

DB 71 IIKDIFQAIQGISHRIMHSTEFRYFNDLPNTDNSTFKAIPEFQNLRODRKNGFPSI 130

QY 119 VM-GVPGSFHGRLEPRNSLHLVHSSYSVHMLTOAPKGLTSREGALNKGKIYISKTSPPV 177

DB 131 FMGGYFGSFGRLFPNSYLHFWHSSYSLHWSRVLPALYDEHKRPLNKGCVYICSSPEV 190

QY 178 VREAVLSQFHEDFTWFLNARSQEVVPGNCVTLIRGQCDSPDMQSCFTWELLMATAE 237

DB 191 VSOAYYQFOEDFSLFLRSRSEELVVGGRVLIPLGRGPEHVDHGRNSFFWEILSRFAI 250

QY 238 LVSGGLIDEDKLDTFNIPSYFASLEVKDIVERDGSFTIDHIEGFDLDSVEMQENDKVR 297

DB 251 LVSGEIEOEKFDSDYDFHFAPSRSEIEEVRKESGLKMERLEMFEMDKSNNEHSSSESY 310

QY 298 GEKPTKVVRAPTEPIISNQFGPEIMDKLYDKFTHIVVSDLEAKLPKTSIILVLSKI 354

DB 311 GTQVAVAVRAIQESWISHHFGEGILSLFENYARLVDEMAKEDIRPISFVLVLRKI 367

Search completed: December 22, 2004, 09:31:43
Job time : 145 secs


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QY 417 -GTATGTTACAAATGNGAGAGTTCCGTGTATGTATGATGAGATACCGGGGCTTT 475
Db 406 TGAAGAAAATGACGCGAGATAGATCGTCTTAATACCCCAATGCTGGCTCTTT 465
QY 476 CCATGCGCGGCTTTTCTCTGTACAGCTTACATTAGTATTCTTCTTACAGTGTCA 535
Db 466 CCACGCGAGACTCTTCCCGAGAGATCAATGCAATTTTTCACCTTTACAGTGTCA 525
QY 536 TTGGCTTCTAGAGCAACCAAAAGAGCTACAGAGAGAGGCTTGCATTAAACAGG 595
Db 526 ATTTTATCCAGGTTCCAGCGGTGGTGTACTGAATTGGGGATCACTGCAACAAAG 585
QY 596 GAAATTTTACATATCAAGAGACCCCTCTGTGTGAAGAGAGCCACTATCTCAAT 655
Db 586 GAGATTTTACTCTTCAAAAGCAATGCTCCGCCCTCCAGAGGCAATTTTGATCAAT 645
QY 656 TCATGAAGATTTCACATGTTTCTCAATGCTAATCCCAAGAGGTGTTCCAAATGTTG 715
Db 646 TACGAAAGATTTTACCAATTTTAAAGATTCGTTCCGAGAGAGTGTCTTCAAGCGCG 705
QY 716 TATGTTGTTATCTTCTGTGTAGGCAATGTTGATCCTTCAATGAGAGCTGCTT 775
Db 706 AATGCTCTTACTTGTGATTTGCAAGAGAT-----GAATGACGCGCCGAA 753
QY 776 TACTTGGGAATTAATGCTATGCGCATTTGCTGAATTTGTTTCAAGAGATTGATGATGA 835
Db 754 TACCATGAGCTTACTTGAGATGCAATTAACGACTTGTGTGAAGGACATCTGAGAGA 813
QY 836 AGATTAATTAAGACCTTCAATATACCGCTATTTTGCATCTGAGAGAGTGAAGA 895
Db 814 AGAAAATTTGACAGTTTCAATGCTTCAATCTATGAGCTTCAAGAGAAATTAAGTG 873
QY 896 TATAGTGAGAGAGGAGATGATTCATCAATGATATGAGAGGGGTGATCT 949
Db 874 CATAGTTGAGAGAGAGTCTTTGAAATTTTGTACTTGGAGACTTTAACT 927
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RESULT 2

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US-09-971-020A-8
; Sequence 8, Application US/0971020A
; Patent No. 6734342
; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Koizumi, No. 6734342omu
; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the
; FILE REFERENCE: 026350-068
; CURRENT APPLICATION NUMBER: US/09/971,020A
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: JP 2000-307,149
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 1316
; TYPE: DNA
; ORGANISM: Coffea arabica
US-09-971-020A-8
```

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Query Match 10.6%; Score 151.2; DB 4; Length 1316;
Beet Local Similarity 51.1%; Pred. No. 4,4e-30;
Matches 534; Conservative 0; Mismatches 473; Indels 39; Gaps 6;
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QY 80 GAAGTGAAAGAGTGTTCATGAACAGGGGGAAGAGAAATGTTATGCAAAA 139
Db 47 GAGGTCCAAAGATCTTGGAGATGAAGAGGAGGAGATACAGCTTACCCAAAGAA 106
QY 140 CTCTTTTTCACGACAGTGGCTCATATGCAACGACGCTTGAAGAAATGAGT-- 197
Db 107 TTCAGCTTACAAATCACTGGTTCGCAAGAGTGAACCTGCTTGAACATGCGTACG 166
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QY 198 GAAACTCTCTTCCAGAGATTTTCACCTTGA-----GCTTTAACGACGAGCTTGG 253
Db 167 GGAATTTGTCGGGCGCAACTTCCCAACATCAACAGTGATTAAGTTGGATTTGGG 226
QY 254 TTGTGAGCGGGTCCAAACACATTTGCGAGTATTTCTACATCAAGAGATGATGAGAAA 313
Db 227 ATGCGCTTGTGACCAACACACTTTTAAAGTTGCGGAGCATTTGCCAAATATTGACA 286
QY 314 GAAATGAGGGAATGGAATTCGCAACACCTGGAAC-----TTGAGTTTACTTGAATGA 367
Db 287 AGTTGGCCAGGAAAGAAAGAAATGAATTAAGACGTCACCAATTCAGATTTTTCGAATGA 346
QY 368 TCTTTTGGAAATGATTTCAATACCTCTTCAAAAGGCTGTGCTGTGA----- 415
Db 347 TCTTTTCCCAATGATTTCAATTCGGTTTCAATTTGCTGCAAGCTTCAACGCAAACT 406
QY 416 GGTATTTGTGAACAATGTGAGAGTTCGCTGTATGTATGTATGAGAGTACCGGGTCTT 475
Db 407 TGAAGAAAATGAGACGCAAAATAGGATCGTCTTAATAGGGGCAATGCCGCTCTT 466
QY 476 CCATGCGCGGCTTTTCTCTGTACAGCTTACATTAGTTCATTCTCTTACAGTGTCA 535
Db 467 CTACGAGAGACTCTTCCCGAGAGATGATGATTTTTCACCTCTTGTATGCTGTCA 526
QY 536 TTGGCTTACTGAGCACCAAAAGGACTCACAGACAGAGAGGCTTGGCATTAACAGAG 595
Db 527 ATGTTTATCTCAGGTTCTCTGCGTGTGTGATGATTTGGGATCATGACAAAG 586
QY 596 GAAATTTTACATATCAAGAGACCCCTCTGTGTGAAGAGAGCTTACTTATCTCAAT 655
Db 587 GAGATTTTACTCTTCCAAACAGAGTGTGCTGCCGCTCCAGAGGCAATTTGATCAAT 646
QY 656 TCATGAAGATTTCACAATGTTTCTCAATGCTATGATCCCAAGAGTGTTCAAATGTTG 715
Db 647 TACGAAAGATTTTACCAATTTTAAGATTCATTCGAAAGTGTGTTTCAATGCGCG 706
QY 716 TATGTTGTTATCTTGTGTGTAGGCAATGTTCTGATCTTCAAGACATGCAAGCTGCTT 775
Db 707 AATGCTCTTACTTGTGATTTGTAAGAGAT-----GAATTAAGCGCCGGA 754
QY 776 TACTTGGGAATTAATGCTATGCGCATTTGCTGAATTTGTTTCAAGAGATTGATGATGA 835
Db 755 TGCCATAGACTTACTTGAATGATGCAATTAACGACTTGTGTGAGGACATCTGAGAGA 814
QY 836 AGATTAATTAAGACCTTCAATATACCGACTATTTTGCATCACTTGAAGAGTGAAGA 895
Db 815 AGAAAATTTGATGATTTCAATCTTCACTATATACCTTCAAGAGAAATGAAGTG 874
QY 896 TATAGTGAGAGAGAGCGATCATTCACAAATGATCATATAGAGGGGTT---GATCTTGA 952
Db 875 CATAGTTGAGAGAGAGGTTCTTTGAAATTTTATCCTGAGACTTTTAAAGTCTTTA 934
QY 953 TAGCGTGAATGACAGAGATGATTAATGGGTTAGAGGGGAAAGTTTACCAAGTTGT 1012
Db 935 CGATGCTGCTCTCTATTTGACGATGAACATATTAAGCAGATGATGTGATCTTCGT 994
QY 1013 CAGGCTTTCACAGAGCTTATATTTCAACAGTTTGGACCTGAATTCAGAGCAAACT 1072
Db 995 TAGAGCAGTTTACGAAACCATCTCTGCAAGTCAATTTTGAAGAGCTTATATCTGACAT 1054
QY 1073 AATAGCAAAATTCATCAATGTGAG 1098
Db 1055 ATTCACAGGTTTGGAGAGATGAG 1080
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RESULT 3

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US-09-971-020A-4
; Sequence 4, Application US/0971020A
; Patent No. 6734342
; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Koizumi, No. 6734342omu
```

;; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the
;; FILE REFERENCE: 026350-068
;; CURRENT APPLICATION NUMBER: US/09/971,020A
;; PRIOR APPLICATION NUMBER: 2001-10-05
;; PRIOR FILING DATE: 2000-10-06
;; NUMBER OF SEQ ID NOS: 22
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO: 4
;; LENGTH: 1360
;; TYPE: DNA
;; ORGANISM: Coffea arabica
US-09-971-020A-4

Query Match 10.5%; Score 149.2; DB 4; Length 1360;
Best Local Similarity 53.1%; Pred. No. 1.5e-29;
Matches 475; Conservative 0; Mismatches 383; Indels 36; Gaps 6;
QY 80 GAAGGTGAACGAAGTGTTCATGTAACAGGGGGGAGAGAAAGTATTGACAAAA 139
DB 16 GAGGCTCCAGAAAGTCTGCAATATGATGAGGCGAAGCGAAGCTTACGCCAAGA 75
QY 140 CTCTTCTTACGCAACAAGTGCCTCAATGACAGCCAGCGCTAGAAATGCAATT-- 197
DB 76 TTCACTCTTCATCAACTGCTTCTGCGCAAGTGAACCTGTCTTGAACAAATGCGTAG 135
QY 198 GAAACTCTCTTCCAGAGATTTCCACCTTCA---GCTTTAAGCGAGCGACTTGGG 253
DB 136 GGAATTTGTTGCGGGCACTTCCCAACATCAACAGTCAATTAAGTTGCAAGTTGGG 195
QY 254 TTGTCAGAGGGTCCAAACACA--TTGCGAGTATTTCTAGATCAAGAAATGATGAA 312
DB 196 ATGCGCTTCGACCAACACACTTTTAACTGTTGGGACTGTCAAAAGTATTGACAA 255
QY 313 AGAAATGACGGAATTGA-----ATTGCCAAACACTGAACTTCAAGTTTACTTGAATGA 367
DB 256 AGTTAAGCAAGAAATGAAGAAATGAATGAAGTCCACCATTCAGGTTTTCTGACTGA 315
QY 368 TCTTTTGGAAATGATTTCAATACCTCTTCAAGGCGCTGTCTGAG----- 416
DB 316 TCTTTTCCAAATGATTTCAATTCGTTTCAATGCTGCTGCCAAGCTTCTACCGAACT 375
QY 417 -GTTATGTAACAATGAGAGAGTCCGTTATGATGAGAGTACCGGGGCTTT 475
DB 376 TGAGAAAGAAATGACCGAAATAGATGTCCTAAAGCCGCAATGCTGCGCTTT 435
QY 476 CCATGCGCGGCTTTTCTCGTAACAGCTTACATTTAGTTCAATTCCTTTACAGTTCA 535
DB 436 CCAAGGCAAGCTTCTCCCGAGAGTCCATGCAATTTTACACTCTTCTTACAGCTTCA 495
QY 536 TTGCTTACTACGACCAAAAGACTCAACAGAGAGAGGCTTGGCATTAACAAGG 595
DB 496 GTTTTATCCAGTGTCCAGCGGTTTGTGACTGAATGGGAGTACATCCAAAG 555
QY 596 GAAATTTACATATCAAGAGCAAGCCCTCTTGAAGAGAGCTATTATCAANT 655
DB 556 GAGCATTTACTCTTCAAGAGCAAGTCTCCGCCGCAAGAGGCAATTTGATCAANT 615
QY 656 TCATGAAGATTTCAATGTTTCTCAATGCTAGATCCCAAGAGTGTTCACAAATGTTG 715
DB 616 TACGAAGATTTTACACATTTTAAAGATGCGTTTGAAGAGTGTTCACGTCGCG 675
QY 716 TATGCTGTGATTAATCTTGTGAGCAATGTTCTGATCTTCAACATGACAGAGCTGCT 775
DB 676 AATGCTCTTCACTTCAATTTGAAGAGAT-----GAATGCGAAGCGGCCGGA 723
QY 776 TACTTGGGAATTAATAGTATGAGCAATGCTGTAATGTTGTTCAAGGATGATAGTGA 835
DB 724 TACCATGACCTTAATGATGAGCAATTAACGACTTGTGAGAGGAGTCTGAGGGA 783
QY 836 AGATAAATTGACACCTTCAATATACCCAGCTAATTTTGCATCACTTGAAGAGTAAAGA 895

DB 784 AGAAAAATTGACAGCTTCAATGTTCAATCTATACAGCTTCAAGAGAAAGTGA 843
QY 896 TATAGTGAAGGAGCGAGTATTCATTAATGATGATATAGAGGGTTGATCT 949
DB 844 CATGTTGAAGAGAGGTTCTTTGAAATTTATTAATTTGACAGACTTTAACT 897
RESULT 4
US-09-971-020A-2
;; Sequence 2, Application US/09971020A
;; Patent No. 6734342
;; GENERAL INFORMATION:
;; APPLICANT: Sano, Hiroshi
;; APPLICANT: Kusanu, Tomonobu
;; APPLICANT: Koizumi, No. 6734342om
;; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the
;; FILE REFERENCE: 026350-068
;; CURRENT APPLICATION NUMBER: US/09/971,020A
;; PRIOR FILING DATE: 2001-10-05
;; PRIOR APPLICATION NUMBER: JP 2000-307,149
;; NUMBER OF SEQ ID NOS: 22
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO: 2
;; LENGTH: 1298
;; TYPE: DNA
;; ORGANISM: Coffea arabica
US-09-971-020A-2
Query Match 9.7%; Score 138.8; DB 4; Length 1298;
Best Local Similarity 51.8%; Pred. No. 8e-27;
Matches 461; Conservative 0; Mismatches 392; Indels 37; Gaps 5;
QY 80 GAAGGTGAACGAAGTGTTCATGTAACAGGGGGGAGAGAAAGTATTGACAAAA 139
DB 34 GAGGCTCCAGAAAGTCTGCAATATGATGAGGCGAAGCTTACGCCAAGA 93
QY 140 CTCTTCTTACGCAACAAGTGCCTCAATGAGCAGCGCTAGAAATGCAAGTTGA 199
DB 94 TGCATCTTCAATCTGCGCTCTTG--CAAGGTGAACCTTCTTGAACAAATGATGACGA 151
QY 200 AACTCTTCTTCCAGAGATTTCC-----ACCTTCAAGCTTCTTACGAGCGGACTTGGT 254
DB 152 GAATGTTGCGGGCCAACTTCCCAACATCAACAAAGTCAATTAAGTTGGGATTTGGGA 211
QY 255 TGTGACGCGGTCACAAACATTCGACAGTATTTCTACATCAAGAAATGAGAAAG 314
DB 212 TCGGCTTCTGACCAACACTTTTAAAGTGGCGGACATTTGCAAAAGTATGACAAA 271
QY 315 AAATGACAGGAATTGA-----ATTGCCAAACACTGAACTTCAAGTTTACTTGAATGAT 368
DB 272 GTTGGCAGAGAAAGAAATGAATTAAGAGTCCACCATTCAGATTTTCTGAAATGAT 331
QY 369 CTTTGTGAATGATTTCAATACCTCTTCAAGGCTGTGCTGAG----- 416
DB 332 CTTTTCCAAATGATTTCAATTCGTTTCAAGTTGCTGCCAAGTTCTTACCGCAACTC 391
QY 417 GTTATGTAACAATGAGAGAGTCCGTTATGATGAGAGTACCGGGGCTTTTC 476
DB 392 GAGAAAGAAATGACGCAAGATAGATGAGTCAATTAAGAGGCAATCTGCGCTTTTC 451
QY 477 CATGCGCGGCTTTTCTCGTAACAGCTTACATTTAGTTCAATTCCTTACAGTCTCAT 536
DB 452 TACGCAAGACTTCTCCCGAGAGTCAATGATTTTGTGACTGTTTGAAGAGTGTAT 511
QY 537 TGGCTTACTCAGGACCAAAAGACTCACAAGAGAGAGGCTTGGCAATTAACAAGGG 596
DB 512 TGTATTATCTCAGGTTCCAGAGGTTTGTGATGATTTGGGATTTGGCAACAAAGG 571
QY 597 AAGATTTACATATCAAGAGAGCCCTCTGTGTTAAGAGAGCTTACTTATTCATTT 656
DB 572 AGTATTACTCTTCCAAAGATGTCGTCGCCCGTCCAGAAAGGCAATATTGATCAATTT 631

QY 657 CATGAAGATTTCACAAATGTTCTCAATGCTAGATCCCAAGAGTGGTTCCAAATGTTGT 716
 Db 632 ACAGAAATTTTACACATTTCTAAGATTCATTCGAAAGAGTGTCTTTCACGTGCCGA 691
 QY 717 ATGTGTGTAATCTTGTGTGTAAGCAATGTTCTGATCCCTTCAGACATGCAAGCTGCTT 776
 Db 692 ATGCTCTTACCTGCATTTGTAAAGTAAAT-----GAATTCAGCAACCGAAT 739
 QY 777 ACTTGGACATTAATCTATGCGCATCTGTGATTTGTTTACAGAGATGATGATGAA 836
 Db 740 CCGCTGACTTACTTACATGAGCAATGAAACGATTTGTTGAGGCACTTCGAGAGAA 799
 QY 837 GATTAATTAAGACACTTCAATATACCCAGCTATTTTGGCATCTTGAAGAGTAAAGAT 896
 Db 800 GAAAAATTGAGTAGTTTCAATATTCATCTTTACACCTTCAGCAAGAAAGTAAAGTGC 859
 QY 897 ATATGAGAGAGGAGGAGATTCATTCATGATGATATATAGAGGGGTTTGA 946
 Db 860 ATAGTTGAGAGAGAGGTTCTTGGCAATTTTATATCTGAGACTTTTAA 909

RESULT 5
 US-09-653-375B-1
 ; Sequence 1, Application US/09653375B
 ; Patent No. 6558922
 ; GENERAL INFORMATION:
 ; APPLICANT: Doudareva, Natalia
 ; APPLICANT: Multifit, Lisa M.
 ; APPLICANT: Mann, Craig
 ; TITLE OF INVENTION: Methods and Compositions for Production of Floral Scent
 ; FILE REFERENCE: 76-02
 ; CURRENT APPLICATION NUMBER: US/09/653,375B
 ; PRIOR APPLICATION NUMBER: US 60/152,393
 ; PRIOR FILING DATE: 1999-09-03
 ; NUMBER OF SEQ ID NOS: 10
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 1
 ; LENGTH: 1363
 ; TYPE: DNA
 ; ORGANISM: Antirrhinum majus
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (19)..(1110)
 US-09-653-375B-1

Query Match 9.4%; Score 134.4; DB 4; Length 1363;
 Best Local Similarity 50.7%; Pred. No. 1.2e-25;
 Matches 460; Conservative 0; Mismatches 406; Indels 42; Gaps 4;
 QY 78 GGAAGGTGACGAAGTGTGTTGATGAAAGAGGGGGAAGAAAGTATGATGACAA 137
 Db 25 GTGATGAAGAACTTTGTGTATGAAATGTCAGAGAGTGTGAAGTAACTAGTCCAC 84
 QY 138 AACTCTTCTTACCAACAAGTGGCTTCAATGTCACAGCCAGGCTAGAAAATGACAGT 197
 Db 85 AATTCTGGCTTCAAAAAGTATGATGTCAAATCATGATGATTTAGAGCAACCTT 144
 QY 198 GAAACTCTTCTTCCAGAGATTT---CCACCTTAAAGCTCTTAAACGAGCGAATTGGGT 254
 Db 145 AAAAGATATATCGGATGATGATGCTTCCAAAATGCTTCAAGATGATGATGAGGT 204
 QY 255 TGTGAGAGGGGTCCAAACATTCGAGTGAATTTCTAGATCAAGAAATGATGAGAAAG 314
 Db 205 TGTTCATATAGGGCTTAACGCCCTTTTGTGTCATGTCGGCATTTAAATACAAATTGAGAT 264
 QY 315 AAATGACAGGGAATTGAA---TTGCCAAACCTGGAATCTTGAAGTTACTGTAATCTT 371
 Db 265 TTGATACACAGAAAGAAATTAATGAATTAACCTGAATTTGAGGTTTCTGAAACGATCTT 324
 QY 372 TTGGAATATGATTTCAATACCTCTTCAAGGCTGTGCTGAGGTATGTGTAAACAA 431

Db 325 CCAGACACGACTTAAACAACCTCTTCAAAATGTTATC-----A 363
 QY 432 TGTGAGAAAGTTCGGTATATGATGATGAGAGTACCGGGGTCTTTCANAGCGGCTTTT 491
 Db 364 CATGAGAAATGAAATCGCTTTGTATATATGTTTGCCTGATCTTTTCACGAGAGCTATG 423
 QY 492 CCGTAAACGCTTCAATTTAGTTACTTCTCTTCAAGTGTTCATTTGCTTACTCAGGCA 551
 Db 424 CCAAAAAGAGCTACACTTTGCTTATTTCTTCAAGTATTTCACTGGCTCTCGAGTT 483
 QY 552 CCAAAAGACTCACAGAGAGAAAGCTTGGCATTTAAACAAGGGAAGATTTCAATCA 611
 Db 484 CCGAAGGGCT-----GAGATTAATACAGACAAACATTTACATGGCA 528
 QY 612 AAGAACCCCTCTGTTGTTAAGAAAGCCTTATCTCAATTTCAATGAAATTTCA 671
 Db 529 ACGAAAGTCTTCGGAAGGTATCAAAAGCATACGCAAAAGCATACGAAAGACTTCTCC 588
 QY 672 ATGTTCTCAATGCTAATCCCAAGAGTGGTTCCAAATGTTGATATGTTGATTA 731
 Db 589 ACATTTCTAAAGTGGAGGCGAGGAATTTGACAGTGGACATGATTTGACATT 648
 QY 732 CGTGTAGGCAATGTTCTGATCCTTTCAGACATGACAGCTGCTTACTTGGAACTATTA 791
 Db 649 AACGCAAGAGTGTGAAGATCCCTGAGCAAGATGATGACATTTTCACTTGCCT 708
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 QY 852 TTCAATATCCAGCTATTTTGCATCATCTTGAAGAAAGTGAATATATGATGAGAGGAC 911
 Db 769 TTAACTCTTCTTATTTTACTCACCATGATACGCCGAAGTGAAGGACGACATTTGATCTG 828
 QY 912 GGATCATTCACATGATGATATGAGAGGCTTGTATCTTGAATGATGATGATGATGATG 971
 Db 829 GGCTCTTTACGTGACAGGCTAAGAGCTTTCGTGTTGTGATGATGATGATGATGATG 888
 QY 972 AATGATTA 979
 Db 889 ACAGATGA 896

RESULT 6
 US-09-027-137-2
 ; Sequence 2, Application US/09027137
 ; Patent No. 6013450
 ; GENERAL INFORMATION:
 ; APPLICANT: Hillman, Jennifer L.
 ; APPLICANT: Corley, Neil C.
 ; APPLICANT: Yue, Henry
 ; TITLE OF INVENTION: CAP1-RELATED PROTEIN
 ; NUMBER OF SEQUENCES: 3
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Incyte Pharmaceuticals, Inc.
 ; STREET: 3174 Porter Dr.
 ; CITY: Palo Alto
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94304
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; OPERATING SYSTEM: IBM Compatible
 ; SOFTWARE: FastSeq for Windows Version 2.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/027,137
 ; FILING DATE: Filed Herewith
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER:
 ; FILING DATE:

RESULT 8
 US-08-630-118A-1
 Sequence 1, Application US/08630118A
 Patent No. 5919901
 GENERAL INFORMATION:
 APPLICANT: Hu Ph.D., Yinghe
 APPLICANT: McCalab Ph.D., Michael L.
 APPLICANT: Bloomquist Ph.D., Brian T.
 APPLICANT: Flores-Riveros Ph.D., Jaime R.
 APPLICANT: Cornfield Ph.D., Linda J.
 TITLE OF INVENTION: Neuropeptide Y Receptor and Nucleic Acid
 TITLE OF INVENTION: Sequences
 NUMBER OF SEQUENCES: 8
 CORRESPONDENCE ADDRESSES:
 ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
 STREET: 300 South Wacker Drive, 32nd Floor
 CITY: Chicago
 STATE: IL
 COUNTRY: USA
 ZIP: 60606
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/630,118A
 FILING DATE: April 8, 1996
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:

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RESULT 10
US-09-235-839-1
/ Sequence 1, Application US/09235839
/ Patent No. 6207799
/ GENERAL INFORMATION:
/ APPLICANT: Hu Ph.D., Yinghe
/ APPLICANT: McCaleb Ph.D., Michael L.
/ APPLICANT: Bloomquist Ph.D., Brian T.
/ APPLICANT: Flores-Riveros Ph.D., Taine R.
/ APPLICANT: Cornfield Ph.D., Linda J.
/ TITLE OF INVENTION: Neuropeptide Y Receptor and Nucleic Acid
/ TITLE OF INVENTION: Sequences
/ NUMBER OF SEQUENCES: 8
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: McDonnell Boenhen Hulbert & Berghoff
/ STREET: 300 South Wacker Drive, 32nd Floor
/ CITY: Chicago
/ STATE: IL
/ COUNTRY: USA
/ ZIP: 60606
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/

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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.36
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/235,839
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/630,118
FILING DATE: April 8, 1996
ATTORNEY/AGENT INFORMATION:
NAME: Greenfield Ph.D., Michael S.
REGISTRATION NUMBER: 37,142
REFERENCE/DOCKET NUMBER: 96,149-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312)913-0001
TELEFAX: (312)913-0002
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2481 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
FEATURE:
NAME/KEY: CDS
LOCATION: 248..1582
US-09-235-839-1

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	Query Match Best Local Similarity	3.7%; 49.68;	Score 52.4;	DB 2;	Length 2604;
	Matches 134;	Conservative 0;	Mismatches 136;	Indels 0;	Gaps 0;
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Db	2334	CATCGTTGATGTTCCAAATGGAAGTCTAAATGCTGCTGCTTTCCCAATTTATTAATA		2393	
QY	1199	CCCTATCACAATATATGCACTAGAGGGTTGCCAAATGATTTGCACAGAAAGATTGGAGA		1258	
Db	2394	ACTTCTAAATATATTTTAAAGTCTGAGATGGTATGATGATACCTAGTGTGTTGTTAATA		2453	
QY	1259	GGGGTCAAATATAGAAAGCATTTTGGCTCTGTGTGGAGAGAGATGTTTTCTTGAATTTAA		1318	
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QY	1319	ATCTGTGATACCAATTCGTAATGTTGGAGAAATGAGAAAGTTGAACATGTAAATTTTAA		1378	

RESULT 14
US-09-235-839-3

Sequence 3, Application US/09235839
Patent No. 6207799
GENERAL INFORMATION:
APPLICANT: Hu Ph.D., Yinghe
APPLICANT: McCalab Ph.D., Michael L.
APPLICANT: Bloomquist Ph.D., Brian T.
APPLICANT: Flores-Riveros Ph.D., Jaime R.
APPLICANT: Cornfield Ph.D., Linda J.
TITLE OF INVENTION: Neuropeptide Y Receptor and Nucleic Acid
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
STREET: 300 South Wacker Drive, 32nd Floor
CITY: Chicago
STATE: IL
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/235,839
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/630,118
FILING DATE: April 8, 1996
ATTORNEY/AGENT INFORMATION:
NAME: Greenfield Ph.D., Michael S.
REGISTRATION NUMBER: 37,142
REFERENCE/DOCKET NUMBER: 96,149-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312)913-0002
TELEFAX: (312)913-0001
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 2604 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
FEATURE:
NAME/KEY: CDS
LOCATION: 371..1705
US-09-235-839-3

Query Match 3.7%; Score 52.4; DB 3; Length 2604;
Best Local Similarity 49.6%; Pred. No. 0.00057;
Matches 134; Conservative 0; Mismatches 136; Indels 0; Gaps 0;

QY 1139 CATCTAGTCCTTCCAGATGATGAGATGTTTAACTGTTGTAATAAAGTGTGT 1198
DB 2334 CATCTAGTCCTTCCAGATGATGAGATGTTTAACTGTTGTAATAAAGTGTGT 2393
QY 1199 CCTATCATATATATGACCTAGAGGTTGTCCTATGATTCACAAAGATTTGAGA 1258
DB 2334 ACTTCTAAGATCATTTTAAAGTCTGTAGATGATGATGATGATGATGATGATG 2453
QY 1259 GGGGTCAATATAGAAAGCATTTTGTCTGTGTGTGAGAGAGAAATGTTTCTGATTAA 1318
DB 2454 TAAAGTAAAGATAGATGATGATGATGATGATGATGATGATGATGATGATGATG 2513
QY 1319 ATCTGTGATACCAATGCTATGTTGGAGAAATGAGAAATGAACTGAACATTTTAA 1378
DB 2514 TGTGTCTCCTAAAGTGAAGCAACGAAAAAAGAAAAAAGAAAAAAGAAAAAAG 2573
QY 1379 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1408

DB 2574 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2603

RESULT 15
US-09-327-035-3
Sequence 3, Application US/09327035
Patent No. 6368824
GENERAL INFORMATION:
APPLICANT: Hu Ph.D., Yinghe
APPLICANT: McCalab Ph.D., Michael L.
APPLICANT: Bloomquist Ph.D., Brian T.
APPLICANT: Flores-Riveros Ph.D., Jaime R.
APPLICANT: Cornfield Ph.D., Linda J.
TITLE OF INVENTION: Neuropeptide Y Receptor and Nucleic Acid
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
STREET: 300 South Wacker Drive
CITY: Chicago
STATE: IL
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/327,035
FILING DATE: 07-Jun-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/838,399
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Greenfield Ph.D., Michael S.
REGISTRATION NUMBER: 37,147
REFERENCE/DOCKET NUMBER: 96,149/WH 405
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312)715-1000
TELEFAX: (312)715-1234
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 2604 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
FEATURE:
NAME/KEY: CDS
LOCATION: 371..1708
US-09-327-035-3

Query Match 3.7%; Score 52.4; DB 3; Length 2604;
Best Local Similarity 49.6%; Pred. No. 0.00057;
Matches 134; Conservative 0; Mismatches 136; Indels 0; Gaps 0;

QY 1139 CATCTAGTCCTTCCAGATGATGATGATGATGATGATGATGATGATGATGATGAT 1198
DB 2334 CATCTAGTCCTTCCAGATGATGATGATGATGATGATGATGATGATGATGATGAT 2393
QY 1199 CCTATCATATATATGACCTAGAGGTTGTCCTATGATTCACAAAGATTTGAGA 1258
DB 2334 ACTTCTAAGATCATTTTAAAGTCTGTAGATGATGATGATGATGATGATGATGATG 2453
QY 1319 ATCTGTGATACCAATGCTATGTTGGAGAAATGAGAAATGAACTGAACATTTTAA 1378
DB 2514 TGTGTCTCCTAAAGTGAAGCAACGAAAAAAGAAAAAAGAAAAAAGAAAAAAG 2573
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Qy      1379 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1408
Db      2574 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2603

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Search completed: December 22, 2004, 19:36:37
 Job time : 156 secs

Result No.	Score	Query Match	Length	DB	ID	Description
1	265.6	18.6	1250	15	US-10-425-114-25381	Sequence 25381, A
2	217.6	15.2	1684	16	US-10-310-154-160	Sequence 160, App
3	216.6	15.2	1391	16	US-10-424-599-97539	Sequence 97539, A
4	216.6	15.2	1391	16	US-10-425-114-14879	Sequence 14879, A
5	213.8	15.0	1221	16	US-10-469-993-9	Sequence 9, Appli
6	208.8	14.6	1361	16	US-10-424-599-55985	Sequence 55985, A
7	208.8	14.6	1361	16	US-10-425-114-28623	Sequence 28623, A
8	201	14.1	1760	18	US-10-739-930-3508	Sequence 3508, App
9	197.8	13.9	1414	16	US-10-424-599-10289	Sequence 10289, A
10	152.8	10.7	1476	14	US-10-049-187-2	Sequence 2, Appli
11	152	10.6	1170	4	US-10-049-187-1	Sequence 1, Appli
12	151.6	10.6	1304	9	US-09-971-020-6	Sequence 6, Appli

13	151.6	10.6	1304	17	US-10-802-773-6	Sequence 6, Appl1
14	151.2	10.6	1316	9	US-09-971-020-8	Sequence 8, Appl1
15	151.2	10.6	1316	17	US-10-623-854A-2	Sequence 2, Appl1
16	151.2	10.6	1316	17	US-10-623-854A-3	Sequence 3, Appl1
17	151.2	10.6	1316	17	US-10-802-773-8	Sequence 8, Appl1
18	149.2	10.5	1360	9	US-09-971-020-4	Sequence 4, Appl1
19	149.2	10.5	1360	17	US-10-802-773-4	Sequence 4, Appl1
20	145.8	10.2	1044	17	US-10-437-863-9348	Sequence 9348, Appl1
21	139.2	9.8	1122	17	US-10-437-863-127582	Sequence 27582, Appl1
22	138.8	9.7	1298	9	US-09-971-020-2	Sequence 2, Appl1
23	138.8	9.7	1298	17	US-10-802-773-2	Sequence 2, Appl1
24	134.4	9.4	1363	16	US-10-469-993-13	Sequence 13, Appl1
25	134	9.4	1155	17	US-10-623-854A-5	Sequence 5, Appl1
26	134	9.4	1155	17	US-10-623-854A-6	Sequence 6, Appl1
27	132.4	9.3	1155	17	US-10-623-854A-8	Sequence 8, Appl1
28	132.4	9.3	1155	17	US-10-623-854A-9	Sequence 9, Appl1
29	125	8.8	1137	17	US-10-437-863-100682	Sequence 100682, Appl1
30	122.2	8.6	1392	17	US-10-437-863-169	Sequence 169, Appl1
31	120.2	8.4	832	18	US-10-425-115-79945	Sequence 79945, Appl1
32	112.6	7.9	562	17	US-10-021-923-12956	Sequence 12956, Appl1
33	112.2	7.9	1128	17	US-10-437-863-93926	Sequence 93926, Appl1
34	111	7.8	1307	16	US-10-425-114-25336	Sequence 25336, Appl1
35	111	7.8	1678	18	US-10-425-115-147786	Sequence 147786, Appl1
36	108.6	7.6	1344	17	US-10-437-863-32804	Sequence 32804, Appl1
37	108.2	7.6	1494	15	US-10-310-154-162	Sequence 162, Appl1
38	107.2	7.5	702	16	US-10-424-599-930605	Sequence 930605, Appl1
39	107.2	7.5	1492	18	US-10-425-115-147782	Sequence 147782, Appl1
40	107.2	7.5	1495	18	US-10-739-030-2009	Sequence 2009, Appl1
41	101.4	7.1	1629	17	US-10-437-863-76286	Sequence 76286, Appl1
42	100.2	7.0	1423	16	US-10-424-599-114531	Sequence 114531, Appl1
43	98.4	6.9	1143	18	US-10-425-115-78833	Sequence 78833, Appl1
44	98.2	6.9	1450	18	US-10-425-115-147784	Sequence 147784, Appl1
45	98	6.9	680	16	US-10-424-599-40679	Sequence 40679, Appl1

ALIGNMENTS

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RESULT 1
US-10-425-114-25381
; Sequence 25381, Application US/10425114
; Publication No. US20040034888A1
GENERAL INFORMATION:
APPLICANT: Liu, Jingdong
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5313)B
CURRENT APPLICATION NUMBER: US/10/425, 114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 25381

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; ORGANISM: Gossypium hirsutum
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; FEATURE:
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; OTHER INFORMATION: Clone ID: LIB3629-008-C2_FL1
US-10-425-114-25381

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Query Match	18.6%;	Score 265.6;	DB 16;	Length 1250;
Best Local Similarity	56.3%;	Pred. No. 2.8e-55;		
Matches 590;	Conservative 0;	Mismatches 434;	Indels 24;	Gaps 4

QY 80 GAAAGTGAACGAAGCTGTTTCATGACAAGCGGGGGAAGGAAAGTAGTATGACAAA 139
DB 66 GAAATGAGCAAGTTTTCATGACAAGCGGAGCTGAGAGGAAAGCTATGCACTAA 125
QY 140 CTCCTTTTCAACGCAAGTGGCTCAATGGCAACCCAGCGTAAAAATGCAATTGA 199

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Db      126 CTCAAAATACAGTCTACTGTCTATCCCTGTCATCCGGGTCTTAAAGCAAGAGTGT 185
Qy      200 AACTCTCTCCAGAGATTTCCACCTTCAAGCTTTAAAGCAGCGGACTTGGTGTGC 259
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Qy      320 CAGGAATGAATTCGCAACACTGCACTTCAAGTTTCACTGAAATCTTTTGGAAA 379
Db      303 CTGTGAATCGGTGATCAACCACTGAAATTTGAGTGTATTAAGACTTCCCGGAA 362
Qy      380 TGATTTCAATACCTCTTCA-----AGGCTGTGTGTGAGGTTATGTAACAA 431
Db      363 TGAATTCACATATTTTCAGTCTTTGCCAGCTTTTGAAGAAATTAACGCAAGAA 422
Qy      432 TGTGAGGAAGT-----CGTGTATGTATGAGAGTACCGGGGTCTTTCATGGCCGGCT 487
Db      423 TGGACCAAGTTCGGGCGTCTTTCACAGCGGGTGTCCCTGGCTCATTTTACGGAGGCT 482
Qy      488 TTTTCTCTGTAAACAGCTTACATTTAGTTCACTCTCTTACAGTGTGATGGCTTACTCA 547
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Qy      548 GGCACCAAAAGCATCTACAGCAGAGAAAGCTTGGCATTAACAAAGGGAAGATTAACAT 607
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Qy      608 ATCAAGAACAAGCCCTCTGTGTGAAGAGGCTTCTTATCTCAATTTCAATGAAGATT 667
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Qy      668 CAGAAATGTTCTCAATCTGATCCAGAGGTTGTCAAATGTTGATGTTGATGAT 727
Db      663 CACTTATTTCTGAAGTTACGCTCAAGAAATAGCTCCAAAGGCGCATGTTTAC 722
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Db      723 ATTAAGGGGCAAGAACCAACCAATCCACCTCAAGCAAAAGCTGTTTACTTGGACATA 782
Qy      788 ATTAGCAATGCGCATGCTGATTTGTTTCAAGAGATTAAGATGAATTAATGA 847
Db      783 CTAGGTCAAGCATTTTCAGATTTGTTTCAAAAGGGGGTGAAGGAAAGTTTGA 842
Qy      848 CACCTTCAATATACCAAGCTATTTTGCATCACTGAGAAAGTGAAGATTAATGAGAG 907
Db      843 TGGCTACTACACCCGATTTAGAACCTTGGCCGGAAGAGATTCAGAGCGAGTAGAGAA 902
Qy      908 GGAAGGATGATTCACATTTGATCAATATAGAGGGGTTGATCT-----TGATAGGT 958
Db      903 AAGAGGGTCTTTCGCTGTGATCTGTCAGAGTGGTATTAACATGAGATTAATGCA 962
Qy      959 AGAAATGCGAGAGATGATTAATGGGTAGAGGGGAAAGTTTCAAGGTGTCAAGGC 1018
Db      963 TGGAGGATCAACTATGACAGACTTGAAGCTTAAAGAAATGCGAGGCTATGAGAGC 1022
Qy      1019 CTTCAAGAGCTTATTAATTTCAACAGTGTGAGCTGAATCATGAGCAACATATATGA 1078
Db      1023 AGTCATATAGTCTATGATGAGAGTCACTTTGAGAGAGATATCATGAGCCGTTTGTTC 1082
Qy      1079 CAATTCACATCAATTTGATTTGAGAT 1106
Db      1083 TAGGTTATGGAATCATGCTGCAAGAT 1110

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RESULT 2

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US-10-310-154-160
; Sequence 160, Application US/10310154
; Publication No. US2003023670A1
; GENERAL INFORMATION:
; APPLICANT: Edgerton, Michael D

```

```

; APPLICANT: Chomet, Paul S.
; APPLICANT: Adams, Thomas H.
; APPLICANT: Ruff, Thomas G.
; APPLICANT: Agarwal, Ameeta K.
; APPLICANT: Ahrens, Jeffrey E.
; APPLICANT: Ball, James A.
; APPLICANT: Bann, G.
; APPLICANT: Bell, Erin
; APPLICANT: Boddupalli, Raghava
; APPLICANT: Deikman, Jill
; APPLICANT: Deng, Molian
; APPLICANT: Dong, Jinhua
; APPLICANT: Duff, Stephen M.
; APPLICANT: Galligan, Meghan M.
; APPLICANT: Hinchey, Brenda S.
; APPLICANT: Huang, Shihshien
; APPLICANT: Johnson, G. Richard
; APPLICANT: Jung, Vincent
; APPLICANT: Kretzmer, Keith A.
; APPLICANT: Laccetti, Lucille B.
; APPLICANT: Lai, Chao-Qiang
; APPLICANT: Lee, Gary
; APPLICANT: Lin, Jie-Yi
; APPLICANT: Liu, Jindong
; APPLICANT: Lu, Bin
; APPLICANT: Luehly, Michael M.
; APPLICANT: Lund, Adrian
; APPLICANT: Madison, Linda L.
; APPLICANT: Malloy, Kathleen A.
; APPLICANT: McKiel, Christine U.
; APPLICANT: Miller, Philip W.
; APPLICANT: Padmayathi, Manchi Kant
; APPLICANT: Parnell, Laurence D.
; APPLICANT: Start, William G.
; APPLICANT: Tennessee, Dan
; APPLICANT: Vidya, K.R.
; APPLICANT: Wang, Haiyun
; APPLICANT: Xu, Zhanguo
; APPLICANT: Xu, Nanfei
; APPLICANT: Yang, Chunzhi
; APPLICANT: Zeng, Xiaoping
; APPLICANT: Zhao, YaJuan
; APPLICANT: Zhou, Li
; TITLE OF INVENTION: Gene Sequences and Uses Thereof in Plants
; FILE REFERENCE: 38-15(52796)B
; CURRENT APPLICATION NUMBER: US/10/310,154
; PRIOR FILING DATE: 2002-12-04
; PRIOR APPLICATION NUMBER: 60/337,358
; NUMBER OF SEQ ID NOS: 736
; SEQ ID NO 160
; LENGTH: 1684
; TYPE: DNA
; ORGANISM: Glycine max
; REATURE:
; NAME/KEY: CDS
; LOCATION: (26)..(1135)
; OTHER INFORMATION:
US-10-310-154-160

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Query Match      15.2%; Score 217.6; DB 15; Length 1684;
Best Local Similarity 55.9%; Pred. No. 2.6e-43;
Matches 496; Conservative 0; Mismatches 359; Indels 33; Gaps 3;

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Qy      80 GAAGTGAACGAGTGTGTTATGTAACAGGGGGAAGAGAAAGTATGACAAAA 139
Db      28 GAAGTAGACAGACTACTGCAATGACGTGGCGCTGACACGCAAGCTATGCAAA 87
Qy      140 CTCTCTTTTACGCAACAAAGTGGCTCAATGAGCAGCCAGGCTAGAAATGCA 199
Db      88 CTCCTTCTTACGCAAAAGTGTATTTGTTGACAAAGCCATTAAGAGGAGCAATAC 147

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QY 200 AACTCTCTTCCAGAGATTTCACCTTCAAGCTCTTAACGCGGAGCTTGGTGTGC 259
DB 148 AAGCTCTATTCGACACCGGTCCAG---AAGCTTGGGGGTTCGAGATTTGGTTGCTC 204
QY 260 AGCGGGTCCAAACACATTCGAGTATTTCAAGTCAAGAGATGATGAAAGAAATG 319
DB 205 TTCTGACCAAAACATTTGCTTGTGTGCTGAATTCATCAAAATTTGTGAGAACTTGG 264
QY 320 CAGGAATTTGAATTCGCAAACTGAACTTGAAGTTTACTGAAATGATCTTTTGGAAA 379
DB 265 TCGGAGGTGAAACCAATTAATTCGAGAAATCAAGAGCTTTCTGAATGATCTTCCGGGA 324
QY 380 TGATTTCAATACCTCTTCAAGGCT-----GTGCTGAGAGTTATGTGA 427
DB 325 TGACTTCAACAAACATCTTCAAGTCCCTTGATAGCTTCAAAAAGAGTTGTGATGAAT 384
QY 428 CAATGTGAGAGAGTTCCGTGTATGTGATGAGAGTACCGGGGCTTTTCATGCGCGCT 487
DB 385 GGAAGTGGGATTTGCTCATGCTACTTCTGCGGCTTCTGCTTCTTCTATGCGAGGCT 444
QY 488 TTTTCTCTGTACACTTACATTTAGTTGATCTTCTCTTACAGTGTTCATGCTTACTCA 547
DB 445 TTTTCCAAATCAAAAGCTTCAATTTGTGCTTCTTATAGCTTCACTGCTATCTAA 504
QY 548 GGCACCAAAAGACTCAACAGAGAGAGCTTGGCATTAACAAGGGAAGATTTTACAT 607
DB 505 GGTTC-----GAGGGGTGAGACAAACAGGGGCAATGTTTACAT 546
QY 608 ATCAAAAGCAAGCCCTCTGTGTGAAGAGAGCTTACTTATCTCAATTCATGAAGATT 667
DB 547 TGGCAGTCAAGACCCGACAAATTTGCAAGAGCTTACTATGAGCAATTTCAAAAGATT 606
QY 668 CACATGTTTCTCATGCTAGTATCCCAAGAGTGTTCCTCAATGTTGATGTGTGAT 727
DB 607 CTCTCTTTTCTCAAGTGTGCTGAGAGAAATTAAGTAAAGAGTGTGATGTCTTAC 666
QY 728 ACTGTGAGTGAAGCATGTTGATCTTCAAGATGAGAGCTTACTTACTTGGGAAT 787
DB 667 ATTTTGGAGAAAGAGAGATGATCTTCTTACAAAGTGTGCTGATGCTTGGAGCT 726
QY 788 ATTACCTATGCGCATTTGCTGATTTGTTTCAAGGAGATGATGATGAATTAATTA 847
DB 727 TATGCTATCTGCTCTTAAGATATGCTTTCAGAGGAATCATAAAGAGACAGTTGA 786
QY 848 CACCTTCAATATCCCAAGCTATTTTGCATCACTTGAAGAGTGAAGATATGTGAGAG 907
DB 787 TACTTTTAACTTCTCTATACATCTTCATCTGAAAGTGAATGGAAGTTCCTTA 846
QY 908 GGAAGGATCATTCACAAATGATCATATGAGGGGTTTGAATCTTGAATG 955
DB 847 AGAAGTTCATTTGCCAGCAATGCTGTAGAGTGTCTGAAGTGAATTTG 894

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RESULT 3

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US-10-424-599-97539
; Sequence 97539, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 97539
; LENGTH: 1391
; TYPE: DNA
; ORGANISM: Glycine max
; FEATURE:

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; OTHER INFORMATION: Clone ID: PAT_MRT3847_59091C.1
US-10-424-599-97539

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Query Match: 15.2%; Score 216.6; DB 16; Length 1391;
Best Local Similarity 56.2%; Pred. No. 4.2e-43;
Matches 495; Conservative 0; Mismatches 344; Indels 42; Gaps 3;

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QY 80 GAAAGTGAACGAAGTGTTCATGATACAGGGGGGAGAGAAAGTATGACCAAA 139
DB 56 GGAATGACACAGTACTGACATTAATGAGAGCTCGGAGAAACAGTATGACAA 115
QY 140 CTCTTCTTCAACGCAAGTGGCTCAATGAGCAGCAGGCTAGAAATGACATTGA 199
DB 116 TTCTTACTGACGAAAGGTGATTTTTTGA CAAGGATATGAGAGAGGACATTA 175
QY 200 AACTCTCTTCCAGAGATTTCACCTTCAAGCTTTAAAGCAGGAGCTTGGTGTGC 259
DB 176 CAGCTCTTACCGCAGCA---TGCTCCAAAGAGCTTGCAGTGTGGAGCTTGGTGTGC 232
QY 260 AGCGGGTCCAAACACATTCGAGTATTTCTACATCAAGAGATGATGAAAGAAATG 319
DB 223 TTCTGAGCAAAACATTTCTTCTGTATATCTGAGCTTAAATGCTGAGAGACTTGG 292
QY 320 CAGGGAATTTGAATTCGCAAACTGGAACCTTCAAGTTTAAATGATCTTTTGGAAA 379
DB 223 TCGAAGACTGAATCATGATGACAGAAADACAGATCTAATGAAGATCTTCCGGGGA 352
QY 380 TGATTTCAATACCTCTTCAAAAGC-----CTGCTCTGAGGT 418
DB 353 TGATTTCAACAAACATCTTCAAGTCCCTTGACAGCTTCAAGAGAACTGTGTAATGA 412
QY 419 TATGTGAACAAATGAGAGAGTTCGATGTATGATGAGAGTACCGGGTCTTTTCA 478
DB 413 AATTAAGCTGGGACATGAAATTTGTTCAATGTTTTCATGAGGTTTCAAGTTCTTTTA 472
QY 479 TGGCGGCTTTTCTCTGTAACAGCTTACATTTAGTATCTTCTTCAAGTTCATTTG 538
DB 473 TGGCAGATCTTTTCAACCAAAAGTCTGATTTTGTATCTCTGTCAGAGCTTATGTG 532
QY 539 GCTTACGAGCACCAGAAAGACTCAACAGCAGAGAGGCTTGGCATTTAAACAGGGGA 598
DB 533 GCTATCCAAAGTTC-----TGATGTGTGAGAAACATTAAGGGCA 574
QY 599 GATTTACATCAAAAGACAGCCCTCTGTGTAAGAGCTTACTTATCTCAATTTCA 658
DB 575 CATTTACATGCGCAGACCAAGTCTTAAATGCTTAAAGCTTATTCAGAGCAATATCA 634
QY 659 TGAAGATTTCACAATGTTTCTCAATGCTAGATCCCAAGAGTGTTCCAATGTGTAT 718
DB 635 AAGAGATTTCTGTTGTTTGAAGTGTGAGCGGAGAAATCGTGAAGGGGTCGTAT 694
QY 719 GGTGTGATTAATCTTGTGTGAGCAATGTTTGTGATCTTCAAGATGAGAGTGTTC 778
DB 695 GGTCTGACATTTTGGAGAGAGAGAGAGAGAGATCTAGCAAAAGTGTGTATAT 754
QY 779 TTGGAGCTATTTAGTATGCGCATGCTGAATTTGTTTCAAGGATGATGATGAAGA 838
DB 755 ATGGAGACTTTTGGTATGAGCTTAAATGATGATGCTGAGAGAAATCATTAAGAGAA 814
QY 839 TAAATTTAGACACTTCAATATACCCAGCTATTTTGCATCACTTGAAGAGTGAAGATAT 898
DB 815 GCAATGATATCTTCAACATCTCCATTAACAGCGCATCCCATCTGAAGTGAATTTGA 874
QY 899 AGTGAAGAGAGAGATCATTCACATTTGATCATATGAGG 939
DB 875 GGTTCAAAAGAGGTTCAATTTAGCATTAATGATGAGG 915

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RESULT 4

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US-10-425-114-14879
; Sequence 14879, Application US/10425114
; Publication No. US2004003488A1
; GENERAL INFORMATION:

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RESULT 5
US-10-469-993-9
; Sequence 9, Application US/10469993
; Publication No. US2004007847A1
; GENERAL INFORMATION:
; APPLICANT: Paldi, Nitzan
; TITLE OF INVENTION: METHOD OF ENHANCING ENTOMOPHILOUS
; FILE REFERENCE: 26678
; CURRENT APPLICATION NUMBER: US/10/469,993
; CURRENT FILING DATE: 2003-09-16
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 1321
; TYPE: DNA
; ORGANISM: Clarkia breweri
US-10-469-993-9

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33; Gaps 4;

91 AAGTGTTCATGAACAGGGGGAAGGAACTAGTTATGCACAAACTCTTCTTCA 150

Db
116 AAGTCTTCACATGAAGGTGGCCCGAGAATAAGTTATGCTATTCTAATCTACTT

151 AGCAGACGACCTCCACCGTAAATGGAGCAATGTTTC 175

CCGACAGCAGCGCTAGAAAATGCAGTTGAACCTCTTCT 210

176 AGAGACAAGTGATATCCATCACAAACCCTAATACTGAGGGCCCATCACTGCCCTTAACT 235

211 CCAGAGATTTCACCTTCAAGCTTTAACGACCCCATTCACCTCCTA

[illegible]

230 CCGGCAACUUGTACGACAAGGCTCGCCATAGCCGATTAGATGTTTCATCTGGCCGA 295

271 ACACATTCGAGTGTCTACGATCAAGAGATGATGGAAGAAATGCTAGCGGATTCCT 330

Db

296 ACGCATTAATTGACAGTGACCAGACTCTCCTTAACTCCCTTTGGTTCCTCGAATCGA 330

...GAGACGCCAATCGATCCAACTCCTGGTGAAGAAGATGG 355

331 A T T G C C A A --- C A C T G G A C T T C A G G T T T A C T T G A T G A T C T T T T G G A A T G A T T T C A 387

[illegible]

388 ATACCTTTTCAAGCCGCGATGGATTG

OY CCCCCGAAAGACTTGA 415

.....GAGGCTATTGGTAACAATGTGAGGAAGTTCCT 447
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416 ATGCTATATTTA-----GGTCTTTCGCCGATTGAACAACGCGTCGATCGAGTT---T 463

448 GTTATGTGATGGAGTACCGGGTCTTTCCATTCCCCCCTTTTCCTT

454
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503 GCCTTATGAGGCTTCTATGGCAGGCTTTCCCTAGAAATACCTAC 523

508 ATTAGTTCATTCCTCTTACAGTGTTCATTGGCTTACTCAGGACCAAAAGACTGCAACCTT

[illegible]

.....CAATAGCCICATGGCTATCTCAGGTTCTATAGGAATAGAA 583

568 GCAGAGAAGGCTTGGCATTAACAAGGGGAGATTACATATCAAGAACAAGCCCTCTG 627

[illegible][illegible]

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626 GTGTCCTCATGCTTACTACAAGCAATTCAGGAGACCATGCGTTGTTTCTCAAGTGC 685

	Query Match	Similarity	14.6%	Score 208.8	DB 16	Length 1361	
	Best Local	Similarity	52.7%	Pred. No. 3	De-41		
	Matches	571	Conservative	0	Mismatches	477	Indels 36; Gaps 4
QY	101	CATGAACAGGGGGGAGAGGAAAGTAGTTATGCACAAA	CTCTTCTTTCACGGCAACAGT	160			
Db	1	CATGAATAGTGGCAAGGGAGGAAAGGATTATGCACAA	CTCATCTCTACAAAGAAAT	60			
QY	161	GAGCTCAATGSCACAGCCAGCCGCTAGAAAATGACGTT	GAAACTCTTCTTCCAGAGATT	220			
Db	61	AATGATTTAAAGGCAACATATCTAGAGAA	---AACTATACGAGATTTATAGCATTTA	117			
QY	221	COACCTTCAAGCTTTTAAACGACGGGACTGGGTTG	ATGAGGGGATCAACACATTGG	280			
Db	118	TTCTTCAGCTGCATGAAAGTGGACAGATTAGGTGTT	CTGTAAGACCAAAATTCATCTCT	177			
QY	281	AGTGAATTTCTACGATCAAGAGAAATGATGAAAAA	GAATGCAGGAATTAATTCACAA	340			
Db	178	TGTGATATCAAAATATACATTGACATTTGTAAC	CAATCCACCCGCTGTAATCAAGACC	237			
QY	341	ACTGGAATCTAGGTTTACTTGATGATCTTTTGGAA	ATGATTTCAATACCTCTTCAA	400			
Db	238	ACCCAGCTTCCAAATTTTATCTCAATGATTTGTT	GGAAATGATTTCAATACCACTTCAA	297			
QY	401	AGCGCTGTGCTC-----GAGGTTATGTGTA	CCAAATGTGAGGAATTCGG	448			
Db	298	GCTCTTCTTCGATTTCTATTAAGAATTGGATTA	AGATTAAGGACACAAAGTTGGTTCATG	357			

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RESULT 7
US-10-425-114-29623
Sequence 29623 Application US/10425114
Publication No. US20040034888A1
GENERAL INFORMATION:
APPLICANT: Liu, Jingtong
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313) B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ. ID NOS: 73128
SEQ ID NO 29623
LENGTH: 1361
TYPE: DNA

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ORGANISM: Glycine max
 FEATURE:
 OTHER INFORMATION: Clone ID: UC-GNPLMINSOY09P11_FLI
 US-10-425-114-29623

Query Match 14.6%; Score 208.8; DB 16; Length 1361;
 Best Local Similarity 52.7%; Pred. No. 3.6e-41;
 Matches 571; Conservative 0; Mismatches 477; Indels 36; Gaps 4;

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QY 101 CATGAACAGGGGAGAGGAGAAAGTATGTTATGCACAAAACCTCTTCTTACGCAACAGT 160
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DB 1 CATGAATATGGGAGAGGAGAAAGAGTATGCAAACTCCATGTCACAAAGAAAT 60
QY 161 GGCCTCAATGGCAACAGCCAGCCCTAGAAAATGCACTTGAATCTCTTCTCAAGATTT 220
    |||||
DB 61 AATGATTTAAAGCAACATATCTAGAGA---ACTTAAACGAGATTTTATACAAATTA 117
QY 221 CCACCTTCAAGCTTTAAGCGAGCGGACTTGGGTTGTCAGCGGGTCCAAACATTCGC 280
    |||||
DB 118 TTCTCCAGCTTCAGAAAGTGGCAGATTTAGGTTGTTCTAGACCAAAATCACTTCT 177
QY 281 AGTGAATTTCTAGATCAAGAGATGATGAAAAGAAATGCGAGAAATGGAATTCGCAAC 340
    |||||
DB 178 TGTGATATCAAAATATCATTTGATGATTCACATGCAACCCGCTGATCAAGAAC 237
QY 341 ACTGAACCTGAGCTTTTCTGATGATCTTTTGAATGATTTCAATACCTCTTCA 400
    |||||
DB 238 ACCCAGCTTCCAAATTTATCTCAATGATTTGTTGAAATGATTTCAATCCACCTTCA 297
QY 401 AGGCTGTGCTCT-----GAGGTTATTTGTAACAATTTGAGGAAGTTCCG 448
    |||||
DB 298 GTCTCTTCTGATTTCTATAAAAGATGATGAAGATAGGAGACACAAGTTGGTTCA 357
QY 449 TTATGATGAGAGTACCGGGCTTTTCATGCGCGCTTTTCTCTGATACAGCTTACA 508
    |||||
DB 358 CTTATATTAATGCTACCCGGGATCTCTTCATGAGAGGCTCTTCCAAATATTTCCATTA 417
QY 509 TTTAGTCAATCTCTTACAGTGTTCATGAGCTTACTTCAAGCAACCAAAAGACTCAAG 568
    |||||
DB 418 CTTTTTCATTCGCGCAAGCTTTTACATGCTTTTCTCAGATTCATTTTGGAGTTAC 477
QY 569 CAGGAAGGCTTGGCATTTAAACAAGGGAATTTACATATCAAAAGACAGCCCTCTGT 628
    |||||
DB 478 TAAAGAGGAGAAATCAATTTAAACAAGGACATGTCATATAGTTACACAAGCCCTCCAGC 537
QY 629 TGTAGAGAGCTTACTTATCTCAATTTCAAGAAATTCACAAATTTCTCAATGCTAG 688
    |||||
DB 538 TGTATACCAAGCTTACCTTAAGCAATTTCAACAAGACTTTAAATTTTGTGAATACAG 597
QY 689 ATCCCAAGGCTGTCCAAATGTTGATGTTGATGTTGATCTGCTGATAGGCAATGTC 748
    |||||
DB 598 TTGAGAGAACTTGTGCGAGAGGACATAGTCTTATGTTTCTTGGCAAAAATAAAC 657
QY 749 TGAATCTTCAGACATGACAGAGCTTTTACTTGGGAATCTATTAATGCTATGCGCAT 808
    |||||
DB 658 TCAT-----AGGAAGCTGTTTGGAAATATTAAGCTTATGCTATGTA 702
QY 809 ATTGTTTCAAGGATTTGATGATGAATGAATTAATTAAGACACTTCAATATCCAGCTTA 868
    |||||
DB 703 CATGCTCTTGGAGGTTTGTATGTAAGAAAGAAATTTGAGACTCTTTAATCAATCAAGTA 762
QY 869 TTTTGATCACTTGAAGAGTGAAGATATAGTGAAGAGGAGGATCAATTCACAAATTA 928
    |||||
DB 763 TGAACCTACAGTTGAAGAAATTAAGCATGATTCAGAAAGAGGCTATCTTCTTCTCA 822
QY 929 TCATATTAAGGGGTTTGTATCTTGAATGCGTGA-----AATGACAGAAATGATAAAG 982
    |||||
DB 823 ACAATTTGAAGTTTAAATCTTGCTTGGGATGAAGGCTTAATGAAGGTTGATGCAAA 882
QY 983 GGTTAGAGGGGAAAAGTTTACCAAGTTGTCAGGGCTTCAACAGACTTATTAATTTCAA 1042
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DB 883 TATTAAGGCCAATTCATGCGCAAGGTCGCAAGAGCAATTAATGAGCCCTCTTGTCTGC 942
  
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QY 1043 CCAATTTGACCTGAAATATGACACAACATATATGCAAAATTCACATATTTAGTTTC 1102
    |||||
DB 943 AAAGTTTGAAGAGAGATTTATTAATGAGTATTTCACTAGCTTATGAAGAAACCTGCGCA 1002
QY 1103 AGATTTGAAGCAAAAGCTTACCGAAGCCACAAGATATCTTAGTCTTTCCAGATTTGA 1162
    |||||
DB 1003 ACTGATGAAAGTGGAGAAATTTGAGCTTACTTGTGTATATCCATGACAAAATATGC 1062
QY 1163 TGA 1166
    |||
DB 1063 TTGA 1066
  
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RESULT 8
US-10-739-930-3508
; Sequence 3508, Application US/10739930
; Publication No. US20040216190A1
; GENERAL INFORMATION:
; APPLICANT: Kovalic, David K.
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH
; FILE REFERENCE: 38-21(53377)B
; CURRENT APPLICATION NUMBER: US/10/739,930
; NUMBER OF SEQ ID NOS: 11088
; SEQ ID NO 3508
; LENGTH: 1760
; TYPE: DNA
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: GLVMA-23APR03-CLUSTER34757_1
US-10-739-930-3508
  
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Query Match 14.1%; Score 201; DB 18; Length 1760;
 Best Local Similarity 51.1%; Pred. No. 3.5e-39;
 Matches 533; Conservative 0; Mismatches 495; Indels 15; Gaps 2;

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QY 80 GAAGTGAACGAAGTGTGTTATGAAACAGGGGAGAGAGAAAGTATGACAA 139
    |||||
DB 419 GATGATGAGAAAGCTTCCATGATGAGAGAGTGGCAAACTAGCTATGCCAAGAA 478
QY 140 CTCTTCTTTCACGCAACAGTGCGCTCAATGSCACAGCCCTGAGAAATGCAATTGA 199
    |||||
DB 479 TTCTTCACTACAGAAAGAGAAATGATGATTAAGTGAAGCATTAATCAACAAAGTTGA 538
QY 200 AACTCTTCTTCCAGAGATTTCCACTTCAAGCTTTAAGCAGCAGGACTGGGTGTC 259
    |||||
DB 539 GAAGC--TCTAATCTTGCACACTCCAAAGAGCATAGGCAATGCTGATTTGGCTGCTC 595
QY 260 ACGGGGTCCAAACACATTCGAGTATTTCTACAGATCAAGAGATGATGAGAAAGAAAT 319
    |||||
DB 596 CTCTGACCAAAACCCATATCAATCAAAAGATATTTTCAAGCCATCCAAAGCAATAG 655
QY 320 CAGGGAATTTGAATTCCAACACTGAACTTCAAGTTTACTGATGATGATCTTTTGGAAA 379
    |||||
DB 656 CCAAGATATGACACACTCCACAGAGTTCAAGGTTACTTCAATGATCTTCCACAAA 715
QY 380 TGAATTTCAATCCCTTCAAGAGGCTGTGCTGAGGTTAT-----GTAA 427
    |||||
DB 716 TGACTTCAATTCATCTTCAAGGCAATCCAGATTTCAAAATTTGCTTAGCAAGACAG 775
QY 428 CAAATGAGAGAAAGTTCGTTATGATGAGAGTACCGGGGCTTTTCATGCGCGCT 487
    |||||
DB 776 GAAAATGAGTTCCTTCCATTTTCAATGAGGCTTACCTGCTCATTTTATGAGAAAGCT 835
QY 488 TTTTCTCTGTAACAGCTTACATTTAGTATCTTCAAGTGTTCATGCTTAACTCA 547
    |||||
DB 836 GTTCCCAAAAGATTAATTTGCACTTGTGCTCTTCAAGTCTTCACTGCTTTCAAG 895
QY 548 GGCACCAAAAGACTCAACAGAGAAAGGCTTGCATTTAAACAAGGAGATTTATAT 607
    |||||
DB 896 GGTTCCTCAGCACTTATATGATGACACAAAAGGCTTTGAAACAAAGGCTGTGTTACAT 955
  
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Qy 608 ATCAAGACAGAGCCCTGCTGTGTAAGAGAGCCCTACTTATCTCAATTCATGAGATT 667
Db 956 TTGTAATCAAGAGCCCTGAGAGTGTCTCAAGCATATCTATCCATTCAGAGAGATT 1015
Qy 668 CACAAATGTTTCTCAATGCTAGATCCCAAGAGTGTCTCAATGCTGTATGTGTAT 727
Db 1016 TTCTTATTCCTTAGGTGAGAGGTGAGAGAACTAGTAGAGGTGAGAGATGTCTGAT 1075
Qy 728 ACTTGCTGTAGGCAATGTCTGATCTTCAGACATGACAGCTGTCTTACTTGGAACT 787
Db 1076 ATTTTGGGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1135
Qy 788 ATTACCTATGCGCATTTGCTGTAATTTGCTTCAAGAGATTTAGATGAGATTAATTA 847
Db 1136 TCTTCCCGTTCATTTGCTATTTCTAGTCTCAAGAGAGAGAGAGAGAGAGAGATTGA 1195
Qy 848 CACCTTCAATATCCAGCTATTTTTCATCTGACTGAGAGAGTGAAGATATATAGTGAAG 907
Db 1196 TTCAATATGATGACATTTCTATGACACATCAAGAGAGATGAGAGAGAGAGAGAG 1255
Qy 908 GAGCGATATTCACAAATTTGATCATATAGAGGGTTTATCTTGTATAGGTGAGAAATGA 967
Db 1256 AGAAGGTCATTTGAGATGAGAGAGGCTAGAGATTTTGTAGATGACAAAGATTAATGA 1315
Qy 968 GAGATATATTAATGCTTGAAGAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1027
Db 1316 GCAAGAAATGATGAGAGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1375
Qy 1028 GCTTATTAATTTCAACAGTTTGAAGCTGAAATCATGACAACTATATGACAAATTCAC 1087
Db 1376 ATCAATGATCTCACACCACTTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1435
Qy 1088 TCACATTTGATTTGAGATTGG 1110
Db 1436 GAGATTGATGATGAGAGAAATGG 1458

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RESULT 9

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US-10-424-599-10289
; Sequence 10289, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(5323)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 10289
; LENGTH: 1414
; TYPE: DNA
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_109300C.1
US-10-424-599-10289

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Query Match 13.9%; Score 197.8; DB 16; Length 1414;
Best Local Similarity 50.9%; Pred. No. 28-38; Indels 15; Gaps 2;
Matches 531; Conservative 0; Mismatches 497;
Qy 80 GAAAGTGAACGAAGTGTGTTGATGAAACAGGAGGAGAGAGAGAGAGAGAGAGAGAGAG 139
Db 73 GGAATGTAAGAAAGGCTTCAACATGACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 132
Qy 140 CTCTTCTTTACGCAACAGTGGCTCAATGAGCAACAGGAGGCTTGAAGAAATGCACTTGA 199
Db 133 TTCCTTACATACGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 192
Qy 200 AACCTCTCTCTCAAGAGATTTCCACCTTCAAGCTTTAAACGAGAGAGAGAGAGAGAGAG 259

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Db 193 GAGAGCTTCAACCACTCCAAAGAGATAGGCTATGCTGATTTGGGCTGCTC 249
Qy 260 AGCGGTCCAAACATTTGAGAGATTTTCAACATCAAGAGATGAGAGAGAGAGAGAGAG 319
Db 250 CTCTGAGCAAAACCCATATCAATCATCAAGATTTTTCAGGAGATTCAGAGCATAG 309
Qy 320 CAGGAGATTTGAATGAGCAACCTGAGAGATTCAGGATTTACTGAGATGATCTTTTGGAAA 379
Db 310 CCACAGATCATGACACCACTCCAGAGATTCAGAGATTCAGAGATTCAGAGATTCAGAG 369
Qy 380 TGATTTCAATACCTCTTCAAGAGGCTGCTGAGGTTAT-----GGTAA 427
Db 370 TGACTTCAATTCATCTTCAAGAGGATTCAGAGATTCAGAGATTCAGAGATTCAGAGAG 429
Qy 428 CAATGTAAGAGAGTCCGCTGTATGATGAGAGATCCGGGCTTTCCATGCGGCT 487
Db 430 GAAAGATGGGTTCCCTTCATTTTCAATGAGAGGCTAACCTGCTCATTTTATGAGAGACT 489
Qy 488 TTTTCTGTAACAGCTTACATTTAGTTTCAATTCCTCTTACAGTGTTCATTTGCTTACTCA 547
Db 490 GTTCCCAACAGTTATCTTGCACTTTGCTCACTCTCTTCACTCTTCACTGCTTCAAG 549
Qy 548 GGCACCAAAAGAGCTCACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 607
Db 550 GTTCTCTCACAATCTATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 609
Qy 608 ATCAAGACAGAGCCCTGCTGTGTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 667
Db 610 TTGTAATCAAGAGCCCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 669
Qy 668 CACAAATGTTTCAATGCTAGATCCCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 727
Db 670 TTCTTGTCTTCTTGTAGTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 729
Qy 728 ACTTGCTGTAGGCAATGTCTGATCTTTCAGACATGAGAGAGAGAGAGAGAGAGAGAG 787
Db 730 ATTTTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 789
Qy 788 ATTACCTATGCGCATTTGCTGTAATTTGCTTCAAGAGAGATTTAGATGAGAGATTTGA 847
Db 790 TCTTCCCGTTCATTTGCTATTTCTAGTCTCACAGGAGAGAGAGAGAGAGAGAGAGAG 849
Qy 848 CACCTTCAATATPACCAAGCTATTTTTCATCTGAGAGAGAGAGAGAGAGAGAGAGAG 907
Db 850 TTCAATATGATGATCTTCTATGACACATCAAGAGAGAGATGAGAGAGAGAGAGAGAG 909
Qy 908 GAGCGATCATTTCAACATTTGATCATATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 967
Db 910 AGAAGGTCATTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 969
Qy 968 GAGAGATATTAATGAGGTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1027
Db 970 GCATGAAAGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1029
Qy 1028 GCTTATTAATTTCAACAGTTTGAAGCTGAAATCATGAGAGAGAGAGAGAGAGAGAG 1087
Db 1030 ATCAATGATCTCACACCACTTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1089
Qy 1088 TCACATTTGATTTGAGATTGG 1110
Db 1090 GAGATTGATGATGAGAGAAATGG 1112

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RESULT 10

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US-10-049-187-2
; Sequence 2, Application US/10049187
; Publication No. US20030064895A1
; GENERAL INFORMATION:
; APPLICANT: CHOI, YANG-DO
; APPLICANT: CHEONG, JONG-JOO
; APPLICANT: LEE, JONG-SEOB
; APPLICANT: SONG, JONG-TAE

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```

; APPLICANT: SONG, SANG-UK
; APPLICANT: SEO, HAK-SOO
; APPLICANT: KOO, YEON-JONG
; TITLE OF INVENTION: GENES FOR S-ADENOSYL L-METHIONINE: JASMONIC ACID
; TITLE OF INVENTION: CARBOXYL METHYLTRANSFERASE AND A METHOD FOR THE
; TITLE OF INVENTION: DEVELOPMENT OF PATHOGEN- AND STRESS-RESISTANT PLANTS
; FILE REFERENCE: 058333/0112
; CURRENT APPLICATION NUMBER: US/10/049,187
; CURRENT FILING DATE: 2002-06-13
; PRIOR APPLICATION NUMBER: PCT/KR01/00953
; PRIOR FILING DATE: 2001-06-05
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 1476
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (15)..(1181)
; OTHER INFORMATION: open reading frame for JMT
US-10-049-187-2

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Query Match      10.7% Score 152.8; DB 14; Length 1476;
Best Local Similarity 48.8%; Pred. No. 3e-27;
Matches 541; Conservative 0; Mismatches 522; Indels 45; Gaps 3;

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QY 68 AGCTACTGCGGGGAGGAGTGAACGAGTGTGTCATGAAACAGGGGGGAGAGAAAGTGG 127
DB 5 AGAGAGAGAGATGAGGATATGCGAGTGTTCATGACATGAAACAGGAGAAACGGGAGAAACAG 64
QY 128 TTATGCAACAACTCTTCTTTCACGCAACAGTGGCTCAATGGACAGCCGCTAGA 187
DB 65 TTATGCCAACAATCTCCACGCTCAGACAAACATATATCTCTAGGAGAGAGATATGGA 124
QY 188 AAATGAGTGAATCTCTCTTCCAGAGATTTCCACTTCAAGCTCTTAAAGCAGCGGA 247
DB 125 CGAGGCTTGAAGATTAATGATGCAATTCAGAGATTTGAGCAATTTGAGATGCGGA 184
QY 248 CTGGGTTGTGCGGGGTCGCAACCATTCGCAATTTTACGATCAAGAGAAATGAT 307
DB 185 CTTAGGCTCTCTCTCGGTCGCAACAGTCTCTTTCACATCTCCACATATGTTGACAGAT 244
QY 308 GGAAGAAATGACAGGAGATTAATGCAACATGGAACCTTCAAGTTTACTGATGA 367
DB 245 CCAACAATCTGTGCTGACCTGACCGCTCAGCTCCTGAGCTCAGAGTCTCTCAACGA 304
QY 368 TCTTTTGGAAATGATTTCAA-----TACCTCTTCAAGGCTGTGCTGAGGT 418
DB 305 CTTCCCTGACATGACTTCACTACATATATGCTCTTTGCAAGATTTTACGACGGGT 364
QY 419 TATGGTGAACAA-----TGTAGAGAACTCCGTGTTATGTAT 457
DB 365 TATATATACAAAGAGGTTTAAAGGTTGCGTGTGAGAGAGAGAAATGTTTGTGTC 424
QY 458 GGGAGTACCGGGGCTTTCATAGCGCGCTTTTCTGTAAACAGCTTACATTTAGTTCA 517
DB 425 GGGCGCTCCAGGTTGCTTACGAGCGTTTCTTCTGCGGAGCTTCACTTTGTGCA 484
QY 518 TTCCCTTACAGTGTCTTCTGCTTACGAGCA-----AAAGACT 562
DB 485 TTTCTTCTTCTGTTTACATGTTGTCTCAGTGTTCATATGTCGAGGCGAGAGAGAGA 544
QY 563 CACAAGCAGAGAGGCTTGGCATTAACAGAGGAGAAATTTACATTAACAAGCAAGCCC 622
DB 545 CAGAGCAATACAGTGATTTTGAAGAAATGGGAGAAATTAACATTAACAAGCAAGTCC 604
QY 623 TCTGTTGTAAAGAGCTTATCTATCTCAATTTCAATGAATTTCAATGTTTCTCAA 682
DB 605 TAAAGAGTGCACATTAAGCTTATGCTTTCATTTCAAACTGATTTCTTGTTTGA 664
QY 683 TGCTAGATCCCAAGAGGTGTTCCAAATGTTGATGTGTTGATATCTTGTTGTTGAGCA 742

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DB 665 GTACACATCTGAGAGTGTGTCCTCGGAGGCCGAATGTTTATCGTCTTGTGATAGAG 724
QY 743 ATGTTCTGATCTCTGACAGATGACAGAGCTGTTTACTTGGAACTATTAGTATGGCCAT 802
DB 725 ATCACTGATCTCCACACAGGAGAGAGTGTCTATCAATGAGAACTCTAGCTCAAGCTCT 784
QY 803 TCTGAAATTTGTTTCAAGGAGATGATGATGAATTAATTAACACCTTCAATATACC 862
DB 785 TATGTCATGCGCAAGAGGGATATCATGAGAGAGAGAAATGATGCTTTCAACGCTCC 844
QY 863 CAGCTATTTTGATGATCTTGAAGAGATGAAATATATGAGAGAGAGAGAGAGATTCAC 922
DB 845 TTACTATCTGCGAGCTCCGAGAGAGTGAATGATGAGAGAGAGAGAGAGAGATTTTC 904
QY 923 AATTGATCATATPAGAGGGGTTTGAATCTTGAATAGCGTGAATATGAGAGAAATGATAATG 982
DB 905 GATGATAGGCTTGAAGATTAAGTCCGATTTGAGAGAGTGGAGATATCAGTAGAGAGAG 964
QY 983 GGTGAGAGGAGAAAGTTTACCAAGTGTGTCAGGGCTTCAAGAGCTTAAATTTCAA 1042
DB 965 TTATGACCTTGCATTAAGTCCAAACCGAAGCCCTAGTATGATGAGAGAGATGCTTA 1024
QY 1043 CCAAGTTGACCTGAAATCAATGACAACTATATGCAATTTCACTCACTTGTATGTTTC 1102
DB 1025 TACCATTAAGAGCTGTGTGTCAGCCGATGCTAGAACCTTCTTGAGAAATGATGATGA 1084
QY 1103 AGATTGAAAGCAAGCTTACGAGACC 1130
DB 1085 CGAGCTTTTGAAGAGATGCAAAAGATC 1112

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RESULT 11

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US-10-049-187-1
; Sequence 1, Application US/10049187
; Publication No. US20030064895A1
; GENERAL INFORMATION:
; APPLICANT: CHOI, YANG-DO
; APPLICANT: CHEONG, JONG-JOO
; APPLICANT: LEE, JONG-SEOB
; APPLICANT: SONG, JONG-TAE
; APPLICANT: SONG, SANG-UK
; APPLICANT: SEO, HAK-SOO
; APPLICANT: KOO, YEON-JONG
; TITLE OF INVENTION: GENES FOR S-ADENOSYL L-METHIONINE: JASMONIC ACID
; TITLE OF INVENTION: CARBOXYL METHYLTRANSFERASE AND A METHOD FOR THE
; TITLE OF INVENTION: DEVELOPMENT OF PATHOGEN- AND STRESS-RESISTANT PLANTS
; FILE REFERENCE: 058333/0112
; CURRENT APPLICATION NUMBER: US/10/049,187
; CURRENT FILING DATE: 2002-06-13
; PRIOR APPLICATION NUMBER: PCT/KR01/00953
; PRIOR FILING DATE: 2001-06-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1170
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-10-049-187-1

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Query Match      10.7% Score 152; DB 14; Length 1170;
Best Local Similarity 48.9%; Pred. No. 4.2e-27;
Matches 536; Conservative 0; Mismatches 515; Indels 45; Gaps 3;

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QY 80 GAAGGTGAACAAGTGTGTTGATGAAACAGGGGGGAGAGAAAGTATGATGACAAAA 139
DB 3 GAGGTATATGCAAGTCTTCAATGAAACAAAGAGAAAGGAGAAACAAATATATCCAAAG 62
QY 140 CTCTTCTTTCACGCAACAGTGGCTCAATGAGCAAGCCGCTGAGAAATGCAAGTGA 199
DB 63 CTCACCGCTCAGAGCAACATATATCTTAGGCAAGAGATGATGAGCAAGGCTTGAA 122

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200 AACTCTCTTCACAGAGATTTCACCTTCAAGCTTAAACGAGCGGACTTGGTGGC 259
Db 123 GAAGTATATGATGACCAATTCAGAGATTTCAGAGATTGGAATCGCGACTTGGCTGC 182
Qy 260 AGCGGCTCCAAACACATTCGAGTATTTCAACATCAAGAGATGATGAAAGAAATG 319
Db 183 CTCGGCTCCGAACAGCTCTTGTCTCCAACTAGTTGACAGATCCAACTTGTG 242
Qy 320 CAGGAAATGATTCGCAACATGGAATCTTCAAGTTTACTGATGATCTTTTGA 379
Db 243 TCTGACCTCGACCGTCCAGTCCGAGTCCAGATCTTCAACGACCTCCAGCA 302
Qy 380 TGAATTTCA-----TACCCTCTTCAAGCGCTGCTGAGGTTATGTAACA 430
Db 303 TGACTTCAACTACATATGTGCTTCTTGCAGAGTTTACGACCGGTTTAAATACAA 362
Qy 431 AT-----GTGAGAAAGTCCGTTTATGATGAGAGTACCGG 469
Db 363 GAGGAGTTTAAAGGTTCCGTCGTGAGAGAGAAATCGTGTGTCGGCGCTCCAG 422
Qy 470 GTCTTTCATGCGCGGCTTTTCTCTGTAACGCTTACATTTAGTTCACTTCTTACG 529
Db 423 TTCGTTTCAACGACGTTTGTCTTCTCGCGAGCCCTTACATTTGTGCAATTTCTTCTAG 482
Qy 530 TGTTCATTTGCTTACTCAGGACCA-----AAAGACTCACAAGAGAGA 574
Db 483 TTTTACATTTGTTGTCTCAGGTTCCATGTCGTGAGCGGAGAGAGAGACAGACATAC 542
Qy 575 AGGCTTGCATTTAAACAGGAGAGATTTTACATATCAACAGACCCCTCTGTTTAA 634
Db 543 AGCTATTTAGAAACATGGGAAATATACATATCAAAAGACAGTCTTAAAGTGACA 602
Qy 635 AGAAGCTTATCTCAATTTCAATGAAATTTTCAATGTTTCTCAATGCTAGTCCCA 694
Db 603 TAAAGCTTATGCTCTTCAATTTCCAACTGATTTCTGTTTGTGAGGTCCAGATCGA 662
Qy 695 AGAGTGTGTTCCAAATGTTGTAATGTTGTAATCTTCTGTTGAGCAATGTTGATCC 754
Db 663 GAGTGTGTTCCGAGGAGGCGCAATGTTTATGCTTCTTGTGTAAGATCACTGATTC 722
Qy 755 TTTCAACATGACAGCTCTTCTTCTTGGAACTATTAAGCTATGCTGCTGAATGAT 814
Db 723 CACAACGAGAGAGTGTCTATCATGGAATCTCTAGCTCAAGCTCTTATGTCATG 782
Qy 815 TTTCAACGAGATTTGATGATGAAATTAATTAACCTTCAATATACCAAGTATTTGC 874
Db 783 CAAGAGAGGTTATCATCGAGAGAGAGATCATCTTTCACGCTCTTACTATGCTGC 842
Qy 875 ATCACTTGAAGAGTGAAGATATAGTGAAGAGAGAGAGATCATCAATGATCATAT 934
Db 843 GAGCTCCGAAGGTTGAAATGCTATAGAGAAAGAGGTTCAATTTGATGATGAGCT 902
Qy 935 AGAGGCTTTGATCTTGTATAGCTGTAAGAAATGCAAGAGATGATTAATGCTTGA 994
Db 903 TGAAGTATGCTGATTTGGAAGGTTGGAAGTATGCTGATGAGAGATTAATGAGCT 962
Qy 995 AAAGTTTACAAAGTTGTCAGGCGCTTCAACAGAGCTTATTTTCAACAGTTTGA 1054
Db 963 AATAAGGTTCCAAACCGGAGCCCTTCAATGAGTGGCGGAAGAGTGTCTAATACCATTAAG 1022
Qy 1055 TGAATCATGCAACATATATGACAATTCATCAATGATGATTTGATTTGAGAGC 1114
Db 1023 TGTGTCAGAGCGATGCTAGAACCTTCTGCTGTAATAATGATGAGAGAGCTTTTGA 1082
Qy 1115 AAAGCTACGAAGACC 1130
Db 1083 AAGGATGCAAAAGATC 1098

RESULT 12
US-09-971-020-6
; Sequence 6, Application US/09971020
; Patent No. US20020108143A1

GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Koizumi, No. US20020108143A1om
; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the Gene
; FILE REFERENCE: 026350-068
; CURRENT APPLICATION NUMBER: US/09/971,020
; PRIOR FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: JP 2000-307,149
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 1304
; TYPE: DNA
; ORGANISM: Coffea arabica
US-09-971-020-6

Query Match 10.6%; Score 151.6; DB 9; Length 1304;
Best Local Similarity 51.9%; Pred. No. 5.5e-27;
Matches 464; Conservative 0; Mismatches 394; Indels 36; Gaps 4;

Qy 80 GAAGTGAACGAAGTGTTCATGACAGGAGGAGAGAGAAAGTATGACAAAA 139
Db 46 GAGGCTCAAGAGATCTGATATGATGAGAGGAGAGAGATGACATGACCTAGCAAGAA 105
Qy 140 CTCTTCTTTCACGCAACAGTGGCTCAATGACACAGCAGCGCTTGAATAATGACATTGA 199
Db 106 TTTACCTCTTCAATCAATCACTGTTCTGCGCAAGTGAACCTGCTCTTGAACATGCTAG 165
Qy 200 AACTCTCTTCCAGAGATTTCCACCTTC-----AAGCTTTAAACGAGGAGCTTGG 253
Db 166 GAATTTGTTGGGCGCACTTGCCACATCAACAGTGCATTTAAAGTTGGAGTTGG 225
Qy 254 TTGTGACGCGGATCCAAACACATTCGAGTATTTCTAGATCAAGAGATGATGAAAA 313
Db 226 ATGGCTTCCGAGCAACACACATTTTAAAGTTGCGGACATTTGACAAAGATTTGACA 285
Qy 314 GAATGACAGGAATTTGAATTCGCAACACTGGAAC-----TTCAAGTTTACTTGAATGA 367
Db 286 AGTTAGGCAAGAAATGAAAGATGAAATTAAGAACTCCACATTCAGGTTTCTGACTGA 345
Qy 368 TCTTTTGAATATGATTTCAATACCTCTTGAAGGCTGCTGTGAG----- 416
Db 346 TCTTTTCCAAATGATTTCAATCGGTTTATGTTGCTGCAAGTTTCTACCGCAACT 405
Qy 417 -GTTATTTGTAACAATGAGAAATTCGTTTATGATGAGAGTACCGGCTCTTT 475
Db 406 TGAAGAAAGAAATGAGACCAAGATGATGATCTGCTTAATACCGCAATGCTGCTCTTT 465
Qy 476 CCATGCGCGCTTTTCTCTGTAACAGCTTACATTTAGTTCAATTCCTTCAAGTGTTC 535
Db 466 CCAGGCGAGACTTCTCCCGAGAGTCAATCATTTTTCACCTTCTTACAGCTTCA 525
Qy 536 TTGCTTCTAGGACCAAGAGCTCAACAGCAAGAGAGCTTGGATTAACAAAGG 595
Db 526 ATTTTATCCAGGTTTCCAGCGTTGTGATCTGAATTTGGAGATCATGCGAACAAG 585
Qy 596 GAAGATTTACATATCAAGAGAGCCCTCTGTTTGAAGAGAGCTTATATCAATT 655
Db 586 GAGCATTTACTTTCGAAGAGAGTCTTCCGCGCTCAGAGAGCATTTTGTGATCAATT 645
Qy 646 TACGAAGATTTTACCATTTTAAAGATCGTTTGGAAAGTGTCTTACCGCGCG 705
Db 716 TATGCTTGAATCTGCTGTGAGCAATGTTTGAATCTTCAACATGAGAGCTGCTT 775
Qy 706 AATGCTCTTACTTGCATTTGCAAAAGAGAT-----GAATTCAGCGGCGCA 753
Db 776 TACTTGGAACTATTAGCTATGAGCATTTGTAATGTTTCAACAGGATGATGATGA 835

Db 754 TACCATGACTTACTTATGATGGCAATTAACGACTGTTGTTGAGGACATCTGGAGA 813
QY 836 AGATAATTAGACCTTCAATATACCAGTATTTTGCATCACTTGAGGAAGTGAAGA 895
Db 814 AGAAAAATTGACAGTTTCAATGTTCAATCTATGACGTTCTAGTAGAAGATTAAGTG 873
QY 896 TATAGTGAGAGGAGCGATCATTCACATTTGATCATATATAGAGGGTTGATCT 949
Db 874 CATAGTTGAGGAGGAGAGGTTCTTTTGAATTTTGTACTTGAGACATTTTAAGCT 927

RESULT 13
US-10-802-773-6
; Sequence 6, Application US/10802773
; Publication No. US20040154055A1
; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Koizumi, Nozomu
; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the
; FILE REFERENCE: 026350-091
; CURRENT APPLICATION NUMBER: US/10/802,773
; PRIOR FILING DATE: 2004-03-18
; PRIOR APPLICATION NUMBER: JP 2000-307,149
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 1304
; TYPE: DNA
; ORGANISM: Coffea arabica
US-10-802-773-6

Query Match 10.6%; Score 151.6; DB 17; Length 1304;
Best Local Similarity 51.9%; Pred. No. 5.5e-27;
Matches 464; Conservative 0; Mismatches 394; Indels 36; Gaps 4;
QY 80 GAAGGTGAACGAAGTGTGTTCAATGAACAGGGGGAAGGAAGTATGACACAAA 139
Db 46 GAGACTCCAGAAAGTCTGATATGATGAGGCGAAGCGATGCAAGCTACGCCAAGA 105
QY 140 CTCTTTTTCACGGAATAAGTGCCTTCATGAGCAGCAGCGCTAGAAATGACAGTTGA 199
Db 106 TTGATCTTCAATCAATGATGTTCTCGCCAGAGTGAACCTGTCCTTGAACATGCTGAG 165
QY 200 AACTCTTCTCCAGAGATTTCACCTTC-----AAGCTTTACGAGCGAGCTTGGG 253
Db 166 GGAATGTTGCGGGCCAACTTGGCCAACTCAACAGTGCATTAAGTTGGGATTGGG 225
QY 254 TTGTCAGAGGGGTCGCAACACATTCGAGTATTTCTACGATCAAGAGATGATGAAA 313
Db 226 ATCCGCTTCCGACCAACACACTTTTAAACAGTTGCGGACATTTGACAAAGTATGACAA 285
QY 314 GAAATGACGGAATGAAATGCAACACTGGAAC-----TTGAGGTTTACTTGAATGA 367
Db 286 AGTTAGGCAAGAAATGAAGATGATGAACGTCACCACTTGAAGTTTTCGACTGA 345
QY 368 TCTTTTGGAAATGATTTCAATACCTCTTCAAAAGGCTGTGCTGTAG-----416
Db 346 TCTTTTCCAAATGATTTCAATGCTTTTCATGCTTCTGCAAGTTTTCACGCAAACT 405
QY 417 -GTATTTGTAACAATGTGAGAAATTCGTTTATGTATGTAGTGGAGTACCGGGTCTTT 475
Db 406 TGAGAAAGAAATGAGAGCAAGATAGATGCTGCTTATAGCCGCAATGCTGGCTCTTT 465
QY 476 CCATGCGCGGCTTTTCTCTGTAACAGCTTACATTTAGTTCAATCTCTTACAGTTTGA 535
Db 466 CCAAGGCACTCTTCCCGAGAGTCAATGACATTTTTCACCTCTTTCACAGCTTCA 525
QY 536 TTGCTTACTCAGGACCAAAAGGACTCACAAGACAGAAAGCTTGGCATTAACAAGGG 595
Db 526 ATTTTATCCAGGTTCCAGCGGTTTGTGACTGTAATTTGGGATCACTGCAACAAAG 585

QY 596 GAAGATTATCATATCAAAAGCAAGCCCTCTGTTGTAGAGAGCTTACTTATCTCAAT 655
Db 586 GAGCAATTTACTCTTCCAAAGCAAGTCTCCGCCCTCCAGAAAGCATATTTGATCAAT 645
QY 656 TCATGAAGATTTACAAATGTTTCTCAATGCTAGATCCCAAGAGGTGTTCCAAATGTTG 715
Db 646 TACGAAGATTTTACCAATTTTGAAGATTCGTTGGAAGATGTTGCTTTCACGGCCG 705
QY 716 TATGTTGATATCTTCTGCTGAGGCAATGTTGATCTTCAAGATGACAGCTGCTT 775
Db 706 AATGCTCTTACTTGCATTTTGCAAAGAGAT-----GAATTCAGCGCCCGAA 753
QY 776 TACTTGGGAACATATAGTATAGGCAATTCGTAATGTTTCAAGAGATTTAGATGA 835
Db 754 TACCATGACTTACTGATGATGGCAATTAACGACTTGTTGAGAGGACATCTGAGGA 813
QY 836 AGATTAATTAGACCTTCAATATACCCAGCTATTTTTCATCTTGAAGAGTGAAGA 895
Db 814 AGAAAAATTGACAGTTTCAATGTTCAATCTATGACGCTTCAGTAGAAGAAATTAAGTG 873
QY 896 TATAGTGAGAGGAGCGGATCATTCACATTTGATCATATAGAGGGGTTGATCT 949
Db 874 CATAGTTGAGGAGGAGGTTCTTTGAATTTTGTACTTGAGAGACTTTTAAGCT 927

RESULT 14
US-09-971-020-8
; Sequence 8, Application US/09971020
; Patent No. US20020108143A1
; GENERAL INFORMATION:
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kusano, Tomonobu
; APPLICANT: Koizumi, No. US20020108143A1omn
; TITLE OF INVENTION: Theobromine Synthase Polypeptide of Coffee Plant and the Gene
; FILE REFERENCE: 026350-068
; CURRENT APPLICATION NUMBER: US/09/971,020
; PRIOR FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: JP 2000-307,149
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 1316
; TYPE: DNA
; ORGANISM: Coffea arabica
US-09-971-020-8

Query Match 10.6%; Score 151.2; DB 9; Length 1316;
Best Local Similarity 51.1%; Pred. No. 7e-27;
Matches 534; Conservative 0; Mismatches 473; Indels 39; Gaps 6;
QY 80 GAAGGTGAACGAAGTGTGTTCAATGAACAGGGGGAAGGAAGTATGACACAAA 139
Db 47 GAGCTCCAGAAAGTCTCGGATGATGAGGCGAAGCGATTAACGATACGCAAGAA 106
QY 140 CTCTTTTTCACGCAACAAGTGCCTCAATGGCAGAGCGCTAGAAATGACAGTT--197
Db 107 TTGAGCTTCAATCAATGATGTTCTGCGCAAGGTGAACCTGTCTTGAACAATGCTGACG 166
QY 198 GAAACTCTCTTCCAGAGATTTCCACTTCAA-----GCTTTAAACGAGCGAGCTTGGG 253
Db 167 GGAATGTTGCGGGCCAACTTCCCAACATCAACAAGTCAATTAAGTTGGGATTGGG 226
QY 254 TTGTCAGCGGGTCCAAACACATTCGCAAGTATTTCTACATCAAGAGATGATGAAA 313
Db 227 ATCCGCTTTCGACCAACACACTTTTAAACGTTTCGGAACATTTCCAAAGTATTTGACAA 286
QY 314 GAAATGACGGAATGAAATGCAACACTGGAAC-----TTGAGGTTTACTTGAATGA 367
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RESULT 15
US-10-623-854A-2
; Sequence 2, Application US/10623854A
; Publication No. US20040128709A1
; GENERAL INFORMATION:
; APPLICANT: Uefuji, Hirotsuka
; APPLICANT: Sano, Hiroshi
; APPLICANT: Kozumi, Nozumu
; APPLICANT: Shimyo, Atsuhiko
; TITLE OF INVENTION: Composite utilization of a group of genes in biosynthetic pathway
; FILE REFERENCE: KSM-0216
; CURRENT APPLICATION NUMBER: US/10/623,854A
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 1316
; TYPE: DNA
; ORGANISM: Coffee Arabica

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; FEATURE:
; NAME/KEY: CDS
; LOCATION: (45)..(1163)
; PUBLICATION INFORMATION:
; DATABASE ACCESSION NUMBER: AB048793
; ENTRY DATE: 2000-09-11
US-10-623-854A-2

Query Match 10.6%; Score 151.2; DB 17; Length 1316;
Beet Local Similarity 51.1%; Pred. No. 7e-27; Indels 39; Gaps 6;
Matches 534; Conservative 0; Mismatches 473;

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Qy      1073 ATATGACAAATTCACTCACTTGTAG 1098
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